

TABLES

**TABLE 1-1
CITY OF SAN DIEGO
LONG-TERM RESOURCE MANAGEMENT OPTIONS
STRATEGIC PLAN**

BAS CONSULTANT TEAM MEMBERS

COMPANY	TEAM MEMBER
Bryan A. Stirrat & Associates (BAS)	Bryan A. Stirrat, P.E.
	Christine M. Arbogast, P.E.
	Sonia Y. Nasser, P.E.
	Cesar A. Leon
Clements Environmental (CE)	Chip Clements, P.E.
	Carrie Schneider
HF&H Consultants (HF&H)	Robert D. Hilton, CMC
	Marva Sheehan
J.R. Miller & Associates (JRMA)	Doug Drennen
Katz & Associates	Lewis Michaelson
	Kelly Thomas Jarosz

TABLE 1-2
CITY OF SAN DIEGO
LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN
RESOURCE MANAGEMENT ADVISORY COMMITTEE (RMAC) MEMBERS

MEMBER NAME	AFFILIATION
Kristin Byrne	San Diego County Disposal Association
Lynn France	Integrated Waste Management Technical Advisory Committee
Rich Flammer	Integrated Waste Management Citizens Advisory Committee
Alan Pentico	San Diego County Apartment Association
Lani Lutar	San Diego County Taxpayers Association
Leslie L. McLaughlin	Department of Navy, Southwest Division
Ted Schleutker - Alternate for L. McLaughlin	Department of Navy, Southwest Division
William "Bill" Prinz REHS	Solid Waste Local Enforcement Agency
Shirley Larson	League of Women Voters & Council Member Fry's Nominee
Fatih Buyuksonmez, PH.D., P.E.	San Diego State University - Dept of Civil & Environmental Studies
Jamie Fox Rice	Council District 2 Representative
Andrea M. Eaton	Council District Nominee
Sylvia M. Castillo, P.E.	City of San Diego, Environmental Services Department
Rochelle Monroe	City of San Diego, Environmental Services Department
Brian Henry - Alternate for R. Monroe	City of San Diego, Environmental Services Department
Robert "Bob" Epler	City of San Diego, Environmental Services Department

TABLE 2-1

CITY OF SAN DIEGO

LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN

ENVIRONMENTAL SERVICES DEPARTMENT

CURRENT ZERO WASTE PROGRAM

Council Ordinances / Policies / Administrative Regulations

- Construction and Demolition (C&D) recycling ordinance
- City recycling ordinance for commercial, multi-family and single-family sectors
- Recycled Products Procurement (Council Policy 100-14) – Purchase of recycled content products
- Sustainable Building (Council Policy 900-14) – LEED Silver Certification for new City facilities and fast track permitting for private LEED projects
- Energy Efficient Products Policy (Council Policy 900-18) – Purchase of Energy Star equipment
- Energy Conservation and Management (Council Policy 900-02) – Adherence to energy conservation guidelines
- Environmentally Preferable Purchasing Policy (EP3) – Administrative Regulation

On-going effort to expand organics diversion

- Effort with commercial sector to maintain food waste composting and partner in zero waste events
- Effort to double size of Miramar Greenery composting facility and upgrade permit
- Foodwaste partnership with Sea World, Petco Park, SDSU, PLNU, Del Mar Fair
- Backyard Composting bin events
- Compost Bin Demonstration Gardens in partnership with Zoo, Wild Animal Park, and SeaWorld, and own site at Ridgehaven Green Building
- Backyard Composting workshops and informational booths at community events
- Vermicomposting in schools partnership with Solana Center (siting vermicomposting bins in schools)
- Master Composter training
- Christmas tree recycling
- Bagged compost sales

Outreach and Education

- Waste reduction guide
- Unwanted mail reduction
- Holiday Waste Reduction
- Recycle or Else
- Other educational initiatives such as environmental workshops, tours, etc.
- Commercial and multi-family technical assistance and annual award recognition for top waste reduces
- Commercial and multi-family waste audits
- Zero Waste Earth Day Event in Balboa Park
- Support of Zero Waste at San Diego County Fair and Del Mar Fairgrounds
- Ridgehaven Green Building / Xeriscape Demonstration Project

Legislative Initiatives we actively supported at State Level

- Curbside recycling funding
- E-waste
- Clopyralid
- Other initiatives

Non-Profit / Charity Oversight – to encourage reuse, allow charities free disposal of residue, but must have at least 50 percent diversion

Economic Incentive of \$18 to \$19 per ton for source-separated recycling

Resource Recovery at Miramar Landfill

- Partnership with Goodwill adjacent to recycling center
- Salvage operation (currently in operation)
- CEQA review for C&D facility and other future resource recover facilities currently underway

TABLE 3-1
CITY OF SAN DIEGO
LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN

ENVIRONMENTAL SERVICES DEPARTMENT POPULATION PROJECTIONS TO 2030

Population Projections																											
		Population																									
JURISDICTION	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Carlsbad	92,695	95,514	98,334	101,153	103,972	106,792	109,611	110,559	111,508	112,456	113,405	114,353	115,301	116,250	117,198	118,147	119,095	119,890	120,685	121,480	122,275	123,071	123,866	124,661	125,456	126,251	127,046
Chula Vista	208,675	215,258	221,841	228,425	235,008	241,591	248,174	252,287	256,400	260,513	264,626	268,739	272,852	276,965	281,078	285,191	289,304	292,018	294,732	297,446	300,160	302,875	305,589	308,303	311,017	313,731	316,445
Coronado	26,591	26,745	26,898	27,052	27,205	27,359	27,512	27,735	27,957	28,180	28,402	28,625	28,848	29,070	29,293	29,515	29,738	29,868	29,998	30,128	30,258	30,388	30,518	30,648	30,778	30,908	31,038
Del Mar	4,543	4,563	4,582	4,602	4,622	4,641	4,661	4,709	4,756	4,804	4,852	4,900	4,947	4,995	5,043	5,090	5,138	5,174	5,210	5,246	5,282	5,318	5,353	5,389	5,425	5,461	5,497
El Cajon	97,670	98,212	98,753	99,295	99,836	100,378	100,919	101,349	101,778	102,208	102,637	103,067	103,496	103,926	104,355	104,785	105,214	105,893	106,573	107,252	107,932	108,611	109,290	109,970	110,649	111,329	112,008
Encinitas	62,463	62,946	63,428	63,911	64,393	64,876	65,358	65,625	65,892	66,160	66,427	66,694	66,961	67,228	67,496	67,763	68,030	68,544	69,058	69,572	70,086	70,600	71,114	71,628	72,142	72,656	73,170
Escondido	140,328	141,712	143,095	144,479	145,863	147,246	148,630	149,616	150,603	151,589	152,576	153,562	154,548	155,535	156,521	157,508	158,494	159,638	160,781	161,925	163,068	164,212	165,355	166,499	167,642	168,786	169,929
Imperial Beach	27,799	27,888	27,976	28,065	28,154	28,242	28,331	28,757	29,183	29,609	30,035	30,461	30,886	31,312	31,738	32,164	32,590	32,944	33,297	33,651	34,004	34,358	34,711	35,065	35,418	35,772	36,125
La Mesa	56,007	56,659	57,311	57,964	58,616	59,268	59,920	59,997	60,073	60,150	60,226	60,303	60,380	60,456	60,533	60,609	60,686	61,070	61,453	61,837	62,220	62,604	62,988	63,371	63,755	64,138	64,522
Lemon Grove	25,590	25,852	26,114	26,377	26,639	26,901	27,163	27,333	27,502	27,672	27,841	28,011	28,181	28,350	28,520	28,689	28,859	29,091	29,322	29,554	29,785	30,017	30,249	30,480	30,712	30,943	31,175
National City	56,018	56,666	57,314	57,962	58,609	59,257	59,905	60,825	61,745	62,665	63,585	64,505	65,424	66,344	67,264	68,184	69,104	69,618	70,131	70,645	71,159	71,673	72,186	72,700	73,214	73,727	74,241
Oceanside	172,866	175,186	177,506	179,826	182,145	184,465	186,785	187,755	188,724	189,694	190,664	191,634	192,603	193,573	194,543	195,512	196,482	197,558	198,633	199,709	200,784	201,860	202,935	204,011	205,086	206,162	207,237

		Percent Growth																										
	JURISDICTION	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	Carlsbad	0%	3.0%	3.0%	2.9%	2.8%	2.7%	2.6%	0.9%	0.9%	0.9%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.7%	0.7%	0.7%	0.7%	0.7%	0.6%	0.6%	0.6%	0.6%	
	Chula Vista	0%	3.2%	3.1%	3.0%	2.9%	2.8%	2.7%	1.7%	1.6%	1.6%	1.6%	1.6%	1.5%	1.5%	1.5%	1.4%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	
	Coronado	0%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	
	Del Mar	0%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	0.9%	0.9%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	
	El Cajon	0%	0.6%	0.6%	0.5%	0.5%	0.5%	0.5%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	
	Encinitas	0%	0.8%	0.8%	0.8%	0.8%	0.7%	0.7%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.8%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	
	Escondido	0%	1.0%	1.0%	1.0%	1.0%	0.9%	0.9%	0.7%	0.7%	0.7%	0.7%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	
	Imperial Beach	0%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	1.5%	1.5%	1.5%	1.4%	1.4%	1.4%	1.4%	1.4%	1.3%	1.3%	1.1%	1.1%	1.1%	1.1%	1.0%	1.0%	1.0%	1.0%	1.0%	
	La Mesa	0%	1.2%	1.2%	1.1%	1.1%	1.1%	1.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	
	Lemon Grove	0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	
	National City	0%	1.2%	1.1%	1.1%	1.1%	1.1%	1.1%	1.5%	1.5%	1.5%	1.5%	1.4%	1.4%	1.4%	1.4%	1.4%	1.3%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	
	Oceanside	0%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	
	Poway	0%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	
	San Diego	0%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	1.1%	1.1%	1.1%	1.1%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	
	San Diego-Unincorporated	0%	1.3%	1.3%	1.3%	1.3%	1.3%	1.2%	2.4%	2.4%	2.3%	2.3%	2.2%	2.2%	2.1%	2.1%	2.0%	2.0%	1.5%	1.5%	1.5%	1.5%	1.4%	1.4%	1.4%	1.4%	1.3%	
	San Marcos	0%	3.9%	3.8%	3.6%	3.5%	3.4%	3.3%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.8%	0.8%	0.8%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	
	Santee	0%	2.4%	2.4%	2.3%	2.3%	2.2%	2.2%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	
	Solana Beach	0%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	
	Vista	0%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.7%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	0.8%	
	TOTAL																											

Source: SANDAG Regional Growth Forecast Update, Fall 2006

TABLE 3-2

CITY OF SAN DIEGO
LONG-TERM RESOURCE MANAGEMENT OPTIONS
STRATEGIC PLAN

COUNTYWIDE SOLID WASTE
TONNAGE PROJECTIONS TO 2030

Jurisdiction	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Carlsbad	136,359	131,570	137,573	143,575	149,578	155,580	156,926	158,273	159,619	160,965	162,311	163,657	165,003	166,350
Chula Vista	217,881	204,340	214,010	223,679	233,349	243,018	247,046	251,074	255,101	259,129	263,156	267,184	271,211	275,239
Coronado	52,330	54,412	54,883	55,354	55,825	56,297	56,752	57,208	57,663	58,119	58,574	59,030	59,485	59,941
Del Mar	16,554	15,392	15,492	15,592	15,692	15,792	15,953	16,115	16,277	16,438	16,600	16,761	16,923	17,085
El Cajon	130,096	115,471	116,431	117,392	118,352	119,312	119,820	120,328	120,835	121,343	121,851	124,909	125,428	125,946
Encinitas	81,888	78,004	78,908	79,812	80,715	81,619	81,953	82,287	82,620	82,954	83,288	83,621	83,955	84,289
Escondido	161,204	146,849	149,021	151,193	153,365	155,537	156,569	157,601	158,634	159,666	160,698	161,730	162,762	163,795
Imperial Beach	19,589	18,273	18,360	18,448	18,535	18,623	18,903	19,183	19,463	19,743	20,022	20,302	20,582	20,862
La Mesa	66,512	60,883	61,946	63,010	64,073	65,137	65,220	65,303	65,386	65,470	65,553	65,636	65,720	65,803
Lemon Grove	24,231	25,178	25,565	25,952	26,339	26,726	26,893	27,059	27,226	27,393	27,560	27,727	27,894	28,061
National City	75,888	82,271	83,698	85,125	86,552	87,980	89,331	90,682	92,033	93,384	94,735	96,086	97,437	98,788
Oceanside	167,719	49,269	50,261	51,253	52,244	53,236	53,512	53,789	54,065	54,342	54,618	184,358	185,286	186,214
Poway	67,466	68,787	69,229	69,671	70,113	70,555	70,855	71,155	71,454	71,754	72,054	72,354	72,653	72,953
San Diego	1,992,685	1,895,926	1,921,537	1,947,149	1,972,760	1,998,372	2,020,214	2,042,056	2,063,897	2,085,739	2,107,581	2,131,676	2,153,540	2,175,405
San Diego-Unincorporated	642,718	552,191	563,109	574,026	584,944	595,862	610,315	624,768	639,221	653,674	668,127	735,771	751,351	766,930
San Marcos	110,778	102,213	108,236	114,260	120,283	126,307	127,441	128,575	129,709	130,844	131,978	133,112	134,246	135,380
Santee	60,825	53,722	55,695	57,669	59,642	61,616	62,076	62,537	62,998	63,458	63,919	66,783	67,261	67,739
Solana Beach	19,869	14,795	14,908	15,022	15,135	15,249	15,363	15,477	15,591	15,705	15,819	15,933	16,047	16,161
Vista	137,469	122,530	123,883	125,235	126,588	127,940	128,969	129,998	131,026	132,055	133,083	142,607	143,701	144,794
TOTAL	4,182,061	3,792,076	3,862,746	3,933,417	4,004,087	4,074,757	4,124,111	4,173,465	4,222,819	4,272,173	4,321,527	4,569,237	4,620,485	4,671,733

Jurisdiction	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Sum
Carlsbad	167,696	169,042	170,170	171,299	172,427	173,556	174,685	175,813	176,942	178,070	179,199	180,327	3,968,636
Chula Vista	279,266	283,294	285,952	288,609	291,267	293,925	296,583	299,240	301,898	304,556	307,213	309,871	6,544,871
Coronado	60,396	60,852	61,118	61,384	61,650	61,916	62,182	62,448	62,714	62,980	63,246	63,512	1,433,524
Del Mar	17,246	17,408	17,530	17,651	17,773	17,894	18,016	18,138	18,259	18,381	18,503	18,624	410,143
El Cajon	126,464	126,983	127,803	128,623	129,443	130,263	131,082	131,902	132,722	133,542	134,362	135,182	3,020,319
Encinitas	84,622	84,956	85,598	86,240	86,882	87,524	88,166	88,807	89,449	90,091	90,733	91,375	2,040,464
Escondido	164,827	165,859	167,056	168,252	169,449	170,646	171,842	173,039	174,236	175,432	176,629	177,826	3,945,663
Imperial Beach	21,142	21,422	21,655	21,887	22,119	22,352	22,584	22,816	23,049	23,281	23,514	23,746	502,593
La Mesa	65,886	65,969	66,386	66,803	67,220	67,637	68,054	68,471	68,888	69,305	69,722	70,139	1,592,741
Lemon Grove	28,227	28,394	28,622	28,850	29,078	29,306	29,534	29,762	29,989	30,217	30,445	30,673	677,492
National City	100,139	101,490	102,244	102,999	103,753	104,508	105,262	106,016	106,771	107,525	108,280	109,034	2,353,850
Oceanside	187,143	188,071	189,100	190,130	191,159	192,189	193,218	194,247	195,277	196,306	197,336	198,365	3,345,719
Poway	73,253	73,553	74,021	74,489	74,957	75,425	75,893	76,361	76,829	77,298	77,766	78,234	1,762,878
San Diego	2,197,270	2,219,135	2,239,933	2,260,730	2,281,527	2,302,325	2,323,122	2,343,919	2,364,717	2,385,514	2,406,311	2,427,109	52,371,539
San Diego-Unincorporated	782,509	798,089	810,337	822,586	834,834	847,083	859,332	871,580	883,829	896,077	908,326	920,575	18,003,255
San Marcos	136,515	137,649	138,494	139,339	140,184	141,029	141,874	142,719	143,564	144,409	145,255	146,100	3,217,504
Santee	68,216	68,694	69,255	69,817	70,378	70,939	71,500	72,062	72,623	73,184	73,745	74,307	1,606,114
Solana Beach	16,275	16,389	16,491	16,592	16,694	16,796	16,898	17,000	17,102	17,203	17,305	17,407	388,560
Vista	145,888	146,982	148,325	149,668	151,011	152,354	153,697	155,032	156,367	157,702	159,037	160,372	3,426,312
TOTAL	4,722,981	4,774,229	4,820,088	4,865,947	4,911,806	4,957,665	5,003,524	5,049,374	5,095,225	5,141,076	5,186,927	5,232,777	110,612,178

TABLE 3-3

**CITY OF SAN DIEGO
LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN**

2006 DISPOSAL TONNAGES TO SAN DIEGO LANDFILLS BY JURISDICTION

Tonnage of Each Jurisdiction's SW in Each Landfill (2006)								
Origin of Waste In County (tons for 2006)	Borrego	Las Pulgas	Otay	Ramona	San Onofre	Sycamore	West Miramar	Sum
Carlsbad	-	-	123,693	-	-	5,353	2,524	131,570
Chula Vista	-	-	201,023	-	-	774	2,543	204,340
Coronado	-	-	29,586	-	-	186	24,640	54,412
Del Mar	-	-	255	46	-	8,567	6,524	15,392
El Cajon	-	-	97,602	2	-	15,668	2,199	115,471
Encinitas	-	-	47,400	206	-	27,747	2,651	78,004
Escondido	-	-	3,252	1	-	140,689	2,907	146,849
Imperial Beach	-	-	17,749	-	-	20	504	18,273
La Mesa	-	-	58,302	-	-	1,154	1,427	60,883
Lemon Grove	-	-	23,967	-	-	430	781	25,178
National City	-	-	66,302	-	-	314	15,655	82,271
Oceanside	-	-	37,695	17	-	10,221	1,336	49,269
Out of State	-	-	13,141	2,979	-	11,209	-	27,329
Poway	-	-	2,339	21,046	-	39,369	6,033	68,787
San Diego	-	-	480,197	-	-	128,527	1,287,202	1,895,926
San Diego-Unincorporated	8,360	34,972	208,760	48,396	970	232,316	18,417	552,191
San Marcos	-	-	3,222	-	-	97,873	1,118	102,213
Santee	-	-	36,978	-	-	16,174	570	53,722
Solana Beach	-	-	6,396	-	-	7,348	1,051	14,795
Vista	-	-	9,710	-	-	111,153	1,667	122,530
Subtotal (In County)	8,360	34,972	1,467,569	72,693	970	855,092	1,379,749	3,819,405

Outside County (tons for 2006)	Borrego	Las Pulgas	Otay	Ramona	San Onofre	Sycamore	West Miramar	Sum
Buena Park	-	-	-	-	-	-	-	-
Costa Mesa	-	-	-	-	-	-	-	-
IVRMA	-	-	17	-	-	-	-	17
Imperial - Unincorporated	-	-	-	-	-	-	-	-
Irvine	-	-	-	-	-	-	-	-
La Palma	-	-	-	-	-	-	-	-
Lakewood	-	-	-	-	-	-	-	-
Los Angeles	-	-	-	-	-	-	-	-
Integrated Waste Management Authority	-	-	-	-	-	-	-	-
Los Angeles - Unincorporated	-	-	80	-	-	-	-	80
Newport Beach	-	-	-	-	-	-	-	-
Norwalk	-	-	-	-	-	-	-	-
Orange - Unincorporated	-	-	34	-	-	-	-	34
Riverside	-	-	-	-	-	-	-	-
Riverside - Unincorporated	-	-	32,450	-	-	9,058	-	41,508
San Bernardino	-	-	-	-	-	-	-	-
San Bernardino - Unincorporated	-	-	10	-	-	8,943	-	8,953
Signal Hill	-	-	-	-	-	-	-	-
Stanton	-	-	-	-	-	-	-	-
Subtotal (Outside County)	0	0	32,591	0	0	18,001	-	50,592
TOTAL	8,360	34,972	1,500,160	72,693	970	873,093	1,379,749	3,869,997

Sources: ☐ CIWMB, Jurisdiction Profile
☐ CIWMB, Origin of Waste by Landfill

TABLE 3-4
CITY OF SAN DIEGO
LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN
JURISDICTION DISPOSAL OF SOLID WASTE TO LANDFILL BY PERCENTAGE

Percentage of Each Jurisdiction's SW by Landfill								
Origin of Waste In County (tons for 2006)	Borrego	Las Pulgas	Otay	Ramona	San Onofre	Sycamore	West Miramar	Sum
Carlsbad			94.01%			4.07%	1.92%	100%
Chula Vista			98.38%			0.38%	1.24%	100%
Coronado			54.37%			0.34%	45.28%	100%
Del Mar			1.66%	0.30%		55.66%	42.39%	100%
El Cajon			84.53%	0.002%		13.57%	1.90%	100%
Encinitas			60.77%	0.264%		35.57%	3.40%	100%
Escondido			2.21%	0.001%		95.81%	1.98%	100%
Imperial Beach			97.13%			0.11%	2.76%	100%
La Mesa			95.76%			1.90%	2.34%	100%
Lemon Grove			95.19%			1.71%	3.10%	100%
National City			80.59%			0.38%	19.03%	100%
Oceanside			76.51%	0.035%		20.75%	2.71%	100%
Poway			3.40%	30.60%		57.23%	8.77%	100%
San Diego			25.33%			6.78%	67.89%	100%
San Diego-Unincorporated	1.51%	6.33%	37.81%	8.76%	0.18%	42.07%	3.34%	100%
San Marcos			3.15%			95.75%	1.09%	100%
Santee			68.83%			30.11%	1.06%	100%
Solana Beach			43.23%			49.67%	7.10%	100%
Vista			7.92%			90.71%	1.36%	100%

NOTE: Values Calculated from Table 3-3

TABLE 3-5
CITY OF SAN DIEGO
LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN
LANDFILL ACCEPTANCE OF SOLID WASTE BY AGENCY

Percentage of Each Landfill's SW by Jurisdiction							
Origin of Waste In County (tons for 2006)	Borrego	Las Pulgas	Otay	Ramona	San Onofre	Sycamore	West Miramar
Carlsbad			8.25%	0.00%		0.61%	0.18%
Chula Vista			13.40%	0.00%		0.09%	0.18%
Coronado			1.97%	0.00%		0.02%	1.79%
Del Mar			0.02%	0.06%		0.98%	0.47%
El Cajon			6.51%	0.00%		1.79%	0.16%
Encinitas			3.16%	0.28%		3.18%	0.19%
Escondido			0.22%	0.00%		16.11%	0.21%
Imperial Beach			1.18%	0.00%		0.00%	0.04%
La Mesa			3.89%	0.00%		0.13%	0.10%
Lemon Grove			1.60%	0.00%		0.05%	0.06%
National City			4.42%	0.00%		0.04%	1.13%
Oceanside			2.51%	0.02%		1.17%	0.10%
Out of State			0.88%	4.10%		1.28%	
Poway			0.16%	28.95%		4.51%	0.44%
San Diego			32.01%	0.00%		14.72%	93.29%
San Diego-Unincorporated	100.00%	100.00%	13.92%	66.58%	100.00%	26.61%	1.33%
San Marcos			0.21%	0.00%		11.21%	0.08%
Santee			2.46%	0.00%		1.85%	0.04%
Solana Beach			0.43%	0.00%		0.84%	0.08%
Vista			0.65%	0.00%		12.73%	0.12%
Outside County (tons for 2005)							
Buena Park			0.00%				
Costa Mesa			0.00%				
Imperial - Unincorporated			0.00%				
Irvine			0.00%				
La Palma			0.00%				
Lakewood			0.00%				
Los Angeles							
Integrated Waste Management Authority			0.01%				
Newport Beach			0.00%				
Norwalk			0.00%				
Orange - Unincorporated			0.00%				
Out of State			0.00%				
Riverside			2.16%				
San Bernardino			0.00%				
Signal Hill			0.00%				
Stanton			0.00%				
TOTAL	100%	100%	100%	100%	100%	98%	100%

NOTE: Values Calculated from Table 3-3

TABLE 3-6

**CITY OF SAN DIEGO
LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN**

TRANSFER/PROCESSING FACILITIES

Active Transfer/Processing Facilities (100 Tons Per Day or Larger)

Name	Operator	City	Maximum Permitted Throughput (Tons per Day)	Permitted Capacity (Tons per Day)	Annual Total Permitted Capacity	Types of Waste Accepted
EDCO Station	EDCO Disposal Corporation	La Mesa	200	462	144,144	C&D, GM, I, MM
EDCO Transfer Station	EDCO Disposal Corporation	San Diego	1500	1716	535,392	C&D, I, MM
Escondido Resource Recovery	Jemco Equipment Corporation	Escondido	2500	3402	1,061,424	C&D, GM, MM
Fallbrook Recycling Facility	Fallbrook Refuse Service	Fallbrook	500	792	247,104	C&D, MM
Palomar Transfer Station, Inc.	Palomar Transfer Station, Inc.	Carlsbad	800	800	249,600	C&D, GM, I, MM
Ramona MRF & Transfer Station	Escondido Resource Recovery	Unincorporated	370	405	126,360	C&D, GM, MM
Universal Refuse Removal	Universal Refuse Removal	El Cajon	1000	1000	312,000	MM
EDCO Construction/Demolition	EDCO Waste and Recycling Svcs.	San Marcos	175	174	54,288	C&D
SANCO Resource Recovery	SANCO Services	Lemon Grove	1000	1000	312,000	C&D
Total			8,045	9,751	3,042,312	

Planned Transfer/Processing Facilities

Name	Operator	City	Maximum Permitted Throughput (Tons per Day)	Permitted Capacity (Tons per Day)		Types of Waste Accepted
Miramar Transfer Station	City of San Diego	San Diego	5,000	1,560,000		

Notes: § Tons-per-year were converted to tons-per-day using a 312-day year (52 weeks x 6 days/week)
§ Cubic yards were converted to tons using 500 lbs./cubic yard

Source: CIWMB, Solid Waste Information System

Other Transfer/Processing Facilities

Name	Operator	City	Maximum Permitted Throughput (Tons per Day)	Permitted Capacity (Tons per Day)		
Waste Management of No. County	Waste Management of No. County	Oceanside	4500	4500		Sealed container transfer operation of waste

C&D- Construction Demolition
GM - Green Material
I - Industrial
MM - Mixed Municipal

TABLE 3-7

CITY OF SAN DIEGO

LONG-TERM RESOURCES MANAGEMENT OPTIONS STRATEGIC PLAN

COMPOSTING FACILITIES

Existing Composting Facilities (100 Tons per Day or Larger)				
Name	Operator	City	Maximum Permitted Throughput (Tons per Day)	Permitted Capacity (Tons per Day)
Organic Recycling West	Organic Recycling West	San Diego	340	920
El Corazon Compost Facility	Agri Service	Vista	200	5,000
Evergreen Nursery	Evergreen Distributors, Inc.	San Diego	125	2,500
Oceanside Biosolids	Agri Service	Vista	150	2
Inland Pacific Resource Recovery	Inland Pacific Resource Recovery	Lakeside	450	2,750
Inland Pacific Resource Recovery	Inland Pacific Resource Recovery	Lakeside	400	321
Miramar Greenery	City of San Diego	San Diego	388	192
			2,053	11,685

Planned Composting Facilities				
Name	Operator	City	Maximum Permitted Throughput (Tons per Day)	Permitted Capacity (Tons per Day)
Treesource Recycling	Drake Walters	Ramona		

Notes: § Tons-per-year were converted to tons-per-day using a 312-day year (52 weeks x 6 days/week)
§ Cubic yards were converted to tons using 500 lbs./cubic yard

Source: CIWMB, Solid Waste Information System

TABLE 3-8

CITY OF SAN DIEGO
LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN
RECYCLABLES PROCESSING CENTERS

	NAME	CITY	MATERIALS	VOLUME
1	Coopers Recycling Center	Alpine		
2	Main Street Recycling	Chula Vista		
3	Mikes Recycling	Chula Vista		
4	EDCO Station Buyback Center	La Mesa	Bottles, cans, plastic bottles	
5	EDCO Recycling	Lemon Grove	Bottles, cans, plastic bottles	
6	A1 Alloys	National City		
7	ABC Metals Inc.	National City		
8	Fibre Resources Unlimited Inc.	Spring Valley	Bottles, cans, plastic bottles, paper, cardboard, metal	
9	Spring Valley Environmental Services Inc.	Spring Valley	Bottles, cans, plastic bottles, copper, brass	
10	Spring Valley Recycling	Spring Valley	Bottles, cans, plastic bottles, brass, copper	
11	Your Neighborhood Recycling Centers	Spring Valley	Cans, plastic, scrap metal	5 tons daily 3600-4200 tons annually
12	Liberty Recycling	Del Mar	Cans, plastic bottles, newspapers, cardboard	
13	American Recycling	El Cajon	Bottles, cans, plastic bottles, copper, scrap aluminum	
14	California Metals Inc. (#1)	El Cajon	Nonferrous metals, electronics	
15	California Metals Inc. (#4)	El Cajon	Nonferrous metals, electronics	
16	M&M Recycling Center	El Cajon		
17	Universal Refuse and Recycling	El Cajon		
18	All Ways Recycling	El Cajon	Bottles, cans, plastic bottles, scrap metals	
19	Genes Recycling	El Cajon		
20	Skyline Recycling Co.	Escondido	Cans, plastic bottles, brass, copper	
21	Escondido Recycling Yard Inc.	Escondido	Bottles, cans, plastic bottles, brass, copper, stainless steel	
22	Quality Recycling (#1)	Lakeside	Bottles, cans, plastic bottles, copper, cardboard, stainless steel	
23	Quality Recycling (#2)	Lakeside	Bottles, cans, plastic bottles, copper, cardboard, stainless steel	
24	Ben Recycling and Scrap Metal	Oceanside	Bottles, cans, plastic bottles, brass, copper, stainless steel, scrap metal	
25	Recycle America	Oceanside	Bottles, can, plastic bottles	
26	Ramona Recycling	Ramona	Bottles, cans, plastic bottles, newspapers, cardboard	
27	Richardson Recycling	Ramona	Bottles, cans, plastic bottles	
28	Allan Co./Sycamore Landfill	Santee	Bottles, cans, plastic bottles, copper, metal, stainless steel	
29	Lees Iron and Metal	Vista	Bottles, cans, plastic bottles, copper, metal, stainless steel	
30	Quality Recycling	Vista	Brass, copper, aluminum, stainless steel, newspapers, paper, cardboard	
31	54th Recycling Center/Jorges Used Tires	San Diego		
32	AB Recycling	San Diego		
33	American Recycling	San Diego	Bottles, cans, plastic bottles	
34	Southwest Recycling	San Diego		
35	TOMRA Pacific Inc./San Diego	San Diego	Cans, plastic bottles	
36	Ocean Beach Recycling	San Diego		
37	Leroy Recycling/Old Town Recycling	San Diego	Bottles, cans, plastic bottles, copper, scrap metal	
38	Allan Co.	San Diego	Bottles, cans, plastic bottles, copper	
39	Linda Recycling	San Diego	Bottles, cans, plastic bottles	
40	A to Z Auto Inc.	San Diego	Brass, copper, stainless steel, metal, appliances	
41	All Ways Recycling Co.	San Diego	Bottles, cans, plastic bottles, copper, stainless steel	
42	IMS Recycling Services Inc.	San Diego	Bottles, cans, plastic bottles, brass, copper, stainless steel, wiring	
43	J and R Recycling	San Diego	Bottles, cans, plastic bottles, brass, copper, scrap aluminum, stainless steel	
44	Time Recycling Center	San Diego	Bottles, cans, plastic bottles, copper	
45	AmerMex Recycling Inc.	San Diego		
46	Can Depot Recycling Services	San Diego		
47	Regan Recycling Enterprises	San Diego		
48	Can Depot Recycling Services	San Diego		
49	Allan Co.	San Diego	Bottles, cans, plastic bottles, brass, copper, stainless steel	350 tons daily
50	Palm Ave. Recycling Inc.	San Diego	Bottles, cans, plastic bottles	
51	Save the Planet Recycling Center (#1)	San Diego	Bottles, cans, plastic bottles, copper, scrap metals	
52	Save the Planet Recycling Center (#3)	San Diego	Bottles, cans, plastic bottles, copper, scrap metals	

TABLE 3-9

CITY OF SAN DIEGO
LONG-TERM RESOURCE MANAGEMENT OPTIONS
STRATEGIC PLAN

PROJECTED CAPACITY
WITHOUT MIRAMAR HEIGHT INCREASE AND
WITHOUT SYCAMORE EXPANSION

MSW Declining Capacity Projections by Landfill (2006 Projected Volumes)																	
Landfill	Borrego			Otay			Ramona			Sycamore			West Miramar			ENDING CAPACITY	
	Total Est. Permitted Capacity (cu yds)			62,377,974			2,200,000			48,124,462			56,466,700				
	Remaining Estimated Capacity (cu yds)			33,070,879			690,000			47,388,428			13,687,454 ***				
	Closure Date			4/30/2027 *Tonnage goes to Sycamore when capacity reached			12/31/2006 *Tonnage goes to Sycamore when capacity reached			12/31/2031			12/31/2012 *Tonnage goes to Sycamore when capacity reached				
	Permitted Max Disposal (tons/day)			5,830			295			3,965			8,000 *** adjusted beginning capacity to achieve 2012 closure				
Current Remaining Capacity (tons)*	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	TOTALS	
2001	271,315	4,625	266,690	19,511,819	1,252,768	18,259,051	407,100	68,044	339,056	27,959,173	909,710	27,049,463	17,187,685	1,327,634	15,860,051	61,774,310	
2002	266,690	4,495	262,195	18,259,051	1,272,512	16,986,539	339,056	71,973	267,083	27,049,463	878,314	26,171,149	15,860,051	1,353,296	14,506,755	58,193,720	
2003	262,195	4,916	257,279	16,986,539	1,430,591	15,555,948	267,083	79,915	187,168	26,171,149	900,626	25,270,523	14,506,755	1,410,554	13,096,201	54,367,118	
2004	257,279	5,268	252,011	15,555,948	1,430,746	14,125,202	187,168	81,427	105,741	25,270,523	925,483	24,345,040	13,096,201	1,478,863	11,617,338	50,445,331	
2005	252,011	4,906	247,105	14,125,202	1,489,073	12,636,129	105,741	69,297	36,444	24,345,040	873,093	23,471,947	11,617,338	1,572,089	10,045,249	46,436,873	
2006	247,105	8,360	238,745	12,636,129	1,500,160	11,135,969	36,444	36,444	0	23,471,947	909,342	22,562,605	10,045,249	1,379,749	8,665,500	42,602,818	
2007	238,745	8,525	230,220	11,135,969	1,532,697	9,603,272				22,562,605	964,218	21,598,387	8,665,500	1,398,575	7,266,926	38,698,804	
2008	230,220	8,691	221,529	9,603,272	1,565,234	8,038,037				21,598,387	982,649	20,615,737	7,266,926	1,417,400	5,849,525	34,724,829	
2009	221,529	8,856	212,673	8,038,037	1,597,771	6,440,266				20,615,737	1,001,081	19,614,656	5,849,525	1,436,226	4,413,299	30,680,895	
2010	212,673	9,021	203,652	6,440,266	1,630,308	4,809,958				19,614,656	1,019,513	18,595,144	4,413,299	1,455,051	2,958,248	26,567,002	
2011	203,652	9,240	194,412	4,809,958	1,649,742	3,160,216				18,595,144	1,032,225	17,562,919	2,958,248	1,471,100	1,487,148	22,404,695	
2012	194,412	9,459	184,953	3,160,216	1,669,175	1,491,040				17,562,919	1,044,938	16,517,981	1,487,148	1,487,148	0	18,193,975	
2013	184,953	9,678	175,276	1,491,040	1,491,040	0				16,517,981	2,758,415	13,759,566				13,934,841	
2014	175,276	9,896	165,379							13,759,566	4,297,650	9,461,916				9,627,295	
2015	165,379	10,115	155,264							9,461,916	4,345,844	5,116,072				5,271,336	
2016	155,264	10,334	144,930							5,116,072	4,592,395	523,677				668,607	
2017	144,930	10,553	134,377							523,677	523,677	0				134,377	
2018	134,377	10,772	123,606													123,606	
2019	123,606	10,990	112,615													112,615	
2020	112,615	11,209	101,406													101,406	
2021	101,406	11,381	90,024													90,024	
2022	90,024	11,553	78,471													78,471	
2023	78,471	11,725	66,746													66,746	
2024	66,746	11,897	54,848													54,848	
2025	54,848	12,069	42,779													42,779	
2026	42,779	12,242	30,537													30,537	
2027	30,537	12,414	18,124													18,124	
2028	18,124	12,586	5,538													5,538	
2029	5,538	5,538	0													0	
2030																	

NOTE: Conversion factor to convert from cubic yards to tons is 1,180 lbs/cy. This factor was obtained from the 2007 City of Fresno project (Emcon report).

Sources: § CIWMB, Active Landfills Profile
§ San Diego County, Integrated Waste Management Plan, Countywide Siting Element, 2005
§ CIWMB, Disposal Reporting System, Origin of Waste by Landfill
§ SANDAG Regional Growth Forecast Update, Fall 2006
§ Permitted daily tonnage maximums at Sycamore are:
2008-3,965, 2009-6,800, 2010-9,000, 2015-10,000, 2020-11,000, 2025-13,000

TABLE 3-10

CITY OF SAN DIEGO
LONG-TERM RESOURCE MANAGEMENT OPTIONS
STRATEGIC PLAN

PROJECTED CAPACITY
WITH MIRAMAR HEIGHT INCREASE AND
SYCAMORE EXPANSION AND
IMPACT FROM CITY ORDINANCES

(100% SANDAG)

MSW Declining Capacity Projections by Landfill (2006 Base Volumes)																			
Landfill	Borrego			Otay			Ramona			Sycamore			West Miramar			ENDING CAPACITY	System Capacity Total (after all assumed transfers to Sycamore)	TOTALS	
Total Est. Permitted Capacity (cu yds)	706,745			62,377,974			2,200,000			48,124,462			56,466,700						
Remaining Estimated Capacity (cu yds)	459,856			33,070,879			690,000			47,388,428			13,687,454 ***						
Closure Date	12/31/2040			4/30/2027			12/31/2006			12/31/2031			12/31/2012						
Permitted Max Disposal (tons/day)	50			*Tonnage goes to Sycamore 5,830 when capacity reached			*Tonnage goes to Sycamore 295 when capacity reached			3,965			8,000 *Tonnage goes to Sycamore when capacity reached						
Capacity after Expansion (cy yds)										80,000,000 Assume capacity added in 2010			87,760,000 Assume revised capacity in 2010						
Current Remaining Capacity (tons)*													*** adjusted beginning capacity & expansion tons to achieve 2016 closure						
	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity				
	2001	271,315	4,625	266,690	19,511,819	1,252,768	18,259,051	407,100	68,044	339,056	27,959,173	909,710	27,049,463	17,187,685	1,327,634	15,860,051	61,774,310	61,774,310	
	2002	266,690	4,495	262,195	18,259,051	1,272,512	16,986,539	339,056	71,973	267,083	27,049,463	878,314	26,171,149	15,860,051	1,353,296	14,506,755	58,193,720	58,193,720	
	2003	262,195	4,916	257,279	16,986,539	1,430,591	15,555,948	267,083	79,915	187,168	26,171,149	900,626	25,270,523	14,506,755	1,410,554	13,096,201	54,367,118	54,367,118	
	2004	257,279	5,268	252,011	15,555,948	1,430,746	14,125,202	187,168	81,427	105,741	25,270,523	925,483	24,345,040	13,096,201	1,478,863	11,617,338	50,445,331	50,445,331	
	2005	252,011	4,906	247,105	14,125,202	1,489,073	12,636,129	105,741	69,297	36,444	24,345,040	889,583	23,455,457	11,617,338	1,572,089	10,045,249	46,420,383	46,420,383	
	2006	247,105	8,360	238,745	12,636,129	1,500,160	11,135,969	36,444	36,444	0	23,455,457	909,342	22,546,115	10,045,249	1,379,749	8,665,500	42,586,328	42,586,328	
	2007	238,745	8,525	230,220	11,135,969	1,532,697	9,603,272				22,546,115	964,218	21,581,897	8,665,500	1,398,575	7,266,925	38,682,313	38,682,313	
	2008	230,220	8,691	221,529	9,603,272	1,565,234	8,038,037				21,581,897	982,649	20,599,247	8,246,302	1,391,400	6,854,902	35,713,716	35,713,716	
	2009	221,529	8,856	212,673	8,038,037	1,597,771	6,440,266				20,599,247	1,001,081	19,598,166	6,854,902	1,231,226	5,623,676	31,874,782	31,874,782	
	2010	212,673	9,021	203,652	6,440,266	1,630,308	4,809,958				66,798,166	1,019,513	65,778,654	11,732,753	1,072,551	10,660,201	81,452,465	81,452,465	
	2011	203,652	9,240	194,412	4,809,958	1,649,742	3,160,216				65,778,654	1,032,225	64,746,429	10,660,201	1,071,100	9,589,101	77,690,158	77,690,158	
	2012	194,412	9,459	184,953	3,160,216	1,669,176	1,491,040				64,746,429	1,044,938	63,701,491	9,589,101	1,087,149	8,501,952	65,377,485	73,879,437	
	2013	184,953	9,678	175,276	1,491,040	1,491,040	0				63,701,491	1,255,219	62,446,272	8,501,952	1,103,197	7,398,755	70,020,303	70,020,303	
	2014	175,276	9,896	165,379							62,446,272	2,778,405	59,667,867	7,398,755	1,119,246	6,279,510	66,112,756	66,112,756	
	2015	165,379	10,115	155,264							59,667,867	2,810,551	56,857,316	6,279,510	1,135,293	5,144,216	62,156,797	62,156,797	
	2016	155,264	10,334	144,930							56,857,316	3,041,053	53,816,263	5,144,216	1,151,342	3,992,874	57,954,067	57,954,067	
	2017	144,930	10,553	134,377							53,816,263	3,075,094	50,741,169	3,992,874	1,167,390	2,825,485	53,701,031	53,701,031	
	2018	134,377	10,772	123,606							50,741,169	3,109,134	47,632,036	2,825,485	1,183,438	1,642,046	49,397,687	49,397,687	
	2019	123,606	10,990	112,615							47,632,036	3,143,174	44,488,862	1,642,046	1,199,487	0	44,601,477	44,601,477	
	2020	112,615	11,209	101,406							44,488,862	4,392,749	40,096,113				40,197,519	40,197,519	
	2021	101,406	11,381	90,024							40,096,113	4,437,696	35,658,417				35,748,441	35,748,441	
	2022	90,024	11,553	78,471							35,658,417	4,482,644	31,175,773				31,254,244	31,254,244	
	2023	78,471	11,725	66,746							31,175,773	4,527,591	26,648,182				26,714,928	26,714,928	
	2024	66,746	11,897	54,848							26,648,182	4,572,538	22,075,644				22,130,492	22,130,492	
	2025	54,848	12,069	42,779							22,075,644	4,617,485	17,458,159				17,500,938	17,500,938	
	2026	42,779	12,242	30,537							17,458,159	4,662,424	12,795,735				12,826,272	12,826,272	
	2027	30,537	12,414	18,124							12,795,735	4,707,363	8,088,371				8,106,495	8,106,495	
	2028	18,124	12,586	5,538							8,088,371	4,752,302	3,336,069				3,341,607	3,341,607	
	2029	5,538	5,538								3,336,069	2,799,252	0				0		
	2030																		

NOTE: Conversion factor to convert from cubic yards to tons is 1,180.

Sources: § CIWMB, Active Landfills Profile
§ San Diego County, Integrated Waste Management Plan, Countywide Siting Element, 2005
§ CIWMB, Disposal Reporting System, Origin of Waste by Landfill
§ SANDAG Regional Growth Forecast Update, Fall 2006
§ Permitted daily tonnage maximums at Sycamore are:
2008-3,965, 2009-6,800, 2010-9,000, 2015-10,000, 2020-11,000, 2025-13,000

TABLE 3-11

CITY OF SAN DIEGO
LONG-TERM RESOURCE MANAGEMENT OPTIONS
STRATEGIC PLAN

PROJECTED CAPACITY
WITH MIRAMAR HEIGHT INCREASE AND
SYCAMORE EXPANSION AND
IMPACT FROM CITY ORDINANCES

(50% SANDAG)

MSW Declining Capacity Projections by Landfill (2006 Base Volumes)																
Landfill	Borrego			Otay			Ramona			Sycamore			West Miramar			
Total Est. Permitted Capacity (cu yds)	706,745			62,377,974			2,200,000			48,124,462			56,466,700			
Remaining Estimated Capacity (cu yds)	459,856			33,070,879			690,000			47,388,428			13,687,454			***
Closure Date	12/31/2040			4/30/2027			12/31/2006			12/31/2031			12/31/2016			
Permitted Max Disposal (tons/day)	50			5,830			295			3,965			8,000			
Capacity after Expansion (cy yds)				capacity reached			capacity reached			Assume capacity added in 2010			Assume revised capacity in 2010			ENDING
													*** adjusted beginning capacity & expansion tons to achieve 2016 closure			CAPACITY
Current Remaining Capacity (tons)*	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	TOTALS
2001	271,315	4,625	266,690	19,511,819	1,252,768	18,259,051	407,100	68,044	339,056	27,959,173	909,710	27,049,463	17,187,685	1,327,634	15,860,051	61,774,310
2002	266,690	4,495	262,195	18,259,051	1,272,512	16,986,539	339,056	71,973	267,083	27,049,463	878,314	26,171,149	15,860,051	1,353,296	14,506,755	58,193,720
2003	262,195	4,916	257,279	16,986,539	1,430,591	15,555,948	267,083	79,915	187,168	26,171,149	900,626	25,270,523	14,506,755	1,410,554	13,096,201	54,367,118
2004	257,279	5,268	252,011	15,555,948	1,430,746	14,125,202	187,168	81,427	105,741	25,270,523	925,483	24,345,040	13,096,201	1,478,863	11,617,338	50,445,331
2005	252,011	4,906	247,105	14,125,202	1,489,073	12,636,129	105,741	69,297	36,444	24,345,040	889,583	23,455,457	11,617,338	1,572,089	10,045,249	46,420,383
2006	247,105	8,360	238,745	12,636,129	1,500,160	11,135,969	36,444	36,444	0	23,455,457	909,342	22,546,115	10,045,249	1,379,749	8,665,500	42,586,328
2007	238,745	8,443	230,302	11,135,969	1,516,429	9,619,540				22,546,115	955,002	21,591,113	8,665,500	1,389,162	7,276,338	38,717,293
2008	230,302	8,525	221,777	9,619,540	1,532,697	8,086,843				21,591,113	964,218	20,626,895	7,276,338	1,372,575	5,903,764	34,839,279
2009	221,777	8,608	213,169	8,086,843	1,548,966	6,537,877				20,626,895	973,434	19,653,461	5,903,764	1,202,987	4,700,776	31,105,284
2010	213,169	8,691	204,479	6,537,877	1,565,234	4,972,643				66,853,461	982,649	65,870,812	10,809,853	1,034,900	9,774,953	80,822,886
2011	204,479	8,796	195,683	4,972,643	1,574,526	3,398,117				65,870,812	988,764	64,882,049	9,774,953	1,025,214	8,749,738	77,225,587
2012	195,683	8,901	186,781	3,398,117	1,583,818	1,814,300				64,882,049	994,878	63,887,171	8,749,738	1,033,029	7,716,709	73,604,961
2013	186,781	9,007	177,774	1,814,300	1,593,109	221,191				63,887,171	1,000,992	62,886,179	7,716,709	1,040,843	6,675,866	69,961,009
2014	177,774	9,112	168,662	221,191	221,191	0				62,886,179	2,388,316	60,497,862	6,675,866	1,048,657	5,627,208	66,293,733
2015	168,662	9,218	159,445							60,497,862	2,624,912	57,872,950	5,627,208	1,056,471	4,570,737	62,603,132
2016	159,445	9,317	150,127							57,872,950	2,825,386	55,047,564	4,570,737	1,064,076	3,506,661	58,704,353
2017	150,127	9,417	140,710							55,047,564	2,841,096	52,206,468	3,506,661	1,071,681	2,434,980	54,782,159
2018	140,710	9,517	131,194							52,206,468	2,856,806	49,349,662	2,434,980	1,079,286	1,355,695	50,836,551
2019	131,194	9,616	121,577							49,349,662	2,872,517	46,477,146	1,355,695	1,086,891	268,804	46,867,527
2020	121,577	9,716	111,861							46,477,146	3,713,919	42,763,227	268,804	268,804	0	42,875,088
2021	111,861	9,791	102,071							42,763,227	4,003,112	38,760,115				38,862,186
2022	102,071	9,865	92,206							38,760,115	4,023,501	34,736,614				34,828,819
2023	92,206	9,940	82,266							34,736,614	4,043,890	30,692,723				30,774,989
2024	82,266	10,014	72,252							30,692,723	4,064,280	26,628,444				26,700,695
2025	72,252	10,089	62,163							26,628,444	4,084,669	22,543,775				22,605,938
2026	62,163	10,161	52,002							22,543,775	4,104,561	18,439,214				18,491,215
2027	52,002	10,233	41,769							18,439,214	4,124,454	14,314,760				14,356,529
2028	41,769	10,305	31,465							14,314,760	4,144,346	10,170,414				10,201,879
2029	31,465	10,376	21,088							10,170,414	4,163,753	6,006,661				6,027,749
2030	21,088	10,448	10,640							6,006,661	4,184,131	1,822,530				1,833,170

NOTE: Conversion factor to convert from cubic yards to tons is 1,180.

Sources: § CIWMB, Active Landfills Profile
§ San Diego County, Integrated Waste Management Plan, Countywide Siting Element, 2005
§ CIWMB, Disposal Reporting System, Origin of Waste by Landfill
§ SANDAG Regional Growth Forecast Update, Fall 2006
§ Permitted daily tonnage maximums at Sycamore are:
2008-3,965, 2009-6,800, 2010-9,000, 2015-10,000, 2020-11,000, 2025-13,000

TABLE 3-12

CITY OF SAN DIEGO
LONG-TERM RESOURCE MANAGEMENT OPTIONS
STRATEGIC PLAN

PROJECTED CAPACITY
WITH MIRAMAR HEIGHT INCREASE AND
SYCAMORE EXPANSION AND
IMPACT FROM CITY ORDINANCES

(150% SANDAG)

MSW Declining Capacity Projections by Landfill (2006 Base Volumes)																
Landfill	Borrego			Otay			Ramona			Sycamore			West Miramar			ENDING CAPACITY
Total Est. Permitted Capacity (cu yds)	706,745			62,377,974			2,200,000			48,124,462			56,466,700			
Remaining Estimated Capacity (cu yds)	459,856			33,070,879			690,000			47,388,428			13,687,454 ***			
Closure Date	12/31/2040			4/30/2027 *Tonnage goes to Sycamore when			12/31/2006 *Tonnage goes to Sycamore when capacity			12/31/2031			12/31/2016 *Tonnage goes to Sycamore when			
Permitted Max Disposal (tons/day)	50			5,830 capacity reached.			295 reached.			3,965			8,000 capacity reached.			
Capacity after Expansion (cy yds)										80,000,000 Assume capacity added in 2010			87,760,000 Assume revised capacity in 2010			
													*** Adjusted beginning capacity & expansion tons to achieve 2016 closure			
Current Remaining Capacity (tons)*	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	TOTALS
2001	271,315	4,625	266,690	19,511,819	1,252,768	18,259,051	407,100	68,044	339,056	27,959,173	909,710	27,049,463	17,187,685	1,327,634	15,860,051	61,774,310
2002	266,690	4,495	262,195	18,259,051	1,272,512	16,986,539	339,056	71,973	267,083	27,049,463	878,314	26,171,149	15,860,051	1,353,296	14,506,755	58,193,720
2003	262,195	4,916	257,279	16,986,539	1,430,591	15,555,948	267,083	79,915	187,168	26,171,149	900,626	25,270,523	14,506,755	1,410,554	13,096,201	54,367,118
2004	257,279	5,268	252,011	15,555,948	1,430,746	14,125,202	187,168	81,427	105,741	25,270,523	925,483	24,345,040	13,096,201	1,478,863	11,617,338	50,445,331
2005	252,011	4,906	247,105	14,125,202	1,489,073	12,636,129	105,741	69,297	36,444	24,345,040	889,583	23,455,457	11,617,338	1,572,089	10,045,249	46,420,383
2006	247,105	8,360	238,745	12,636,129	1,500,160	11,135,969	36,444	36,444	0	23,455,457	909,342	22,546,115	10,045,249	1,379,749	8,665,500	42,586,328
2007	238,745	8,608	230,137	11,135,969	1,548,966	9,587,003				22,546,115	973,434	21,572,681	8,665,500	1,407,987	7,257,513	38,647,334
2008	230,137	8,856	221,281	9,587,003	1,597,771	7,989,232				21,572,681	1,001,081	20,571,600	7,257,513	1,410,226	5,847,287	34,629,400
2009	221,281	9,104	212,177	7,989,232	1,646,577	6,342,655				20,571,600	1,028,729	19,542,871	5,847,287	1,259,464	4,587,822	30,685,526
2010	212,177	9,352	202,826	6,342,655	1,695,383	4,647,272				66,742,871	1,056,376	65,686,495	10,696,899	1,110,203	9,586,696	80,123,290
2011	202,826	9,692	193,134	4,647,272	1,725,809	2,921,464				65,686,495	1,076,171	64,610,325	9,586,696	1,117,406	8,469,291	76,194,213
2012	193,134	10,032	183,101	2,921,464	1,756,235	1,165,229				64,610,325	1,095,965	63,514,359	8,469,291	1,142,109	7,327,182	72,189,871
2013	183,101	10,372	172,729	1,165,229	1,165,229	0				63,514,359	1,737,192	61,777,168	7,327,182	1,166,812	6,160,369	68,110,266
2014	172,729	10,713	162,016							61,777,168	2,952,641	58,824,526	6,160,369	1,191,515	4,968,855	63,955,397
2015	162,016	11,053	150,963							58,824,526	3,002,862	55,821,665	4,968,855	1,216,217	3,752,638	59,725,265
2016	150,963	11,412	139,552							55,821,665	3,266,515	52,555,150	3,752,638	1,241,581	2,511,056	55,205,758
2017	139,552	11,770	127,781							52,555,150	3,321,661	49,233,489	2,511,056	1,266,946	1,244,110	50,605,380
2018	127,781	12,129	115,652							49,233,489	3,425,008	45,808,481	1,244,110	1,244,110	0	45,924,133
2019	115,652	12,488	103,165							45,808,481	4,749,629	41,058,852				41,162,017
2020	103,165	12,846	90,318							41,058,852	4,830,140	36,228,712				36,319,031
2021	90,318	13,142	77,177							36,228,712	4,904,264	31,324,448				31,401,625
2022	77,177	13,438	63,739							31,324,448	4,978,388	26,346,060				26,409,799
2023	63,739	13,733	50,005							26,346,060	5,052,512	21,293,548				21,343,553
2024	50,005	14,029	35,976							21,293,548	5,126,636	16,166,912				16,202,888
2025	35,976	14,325	21,651							16,166,912	5,200,761	10,966,151				10,987,802
2026	21,651	14,631	7,020							10,966,151	5,276,716	5,689,435				5,696,455
2027	7,020	7,020	0							5,689,435	5,352,672	336,763				336,763
2028										336,763	336,763	(0)				(0)
2029																
2030																

NOTE: Conversion factor to convert from cubic yards to tons is 1,180.

- Sources: § CIWMB, Active Landfills Profile
§ San Diego County, Integrated Waste Management Plan, Countywide Siting Element, 2005
§ CIWMB, Disposal Reporting System, Origin of Waste by Landfill
§ SANDAG Regional Growth Forecast Update, Fall 2006
§ Permitted daily tonnage maximums at Sycamore are:
2008-3,965, 2009-6,800, 2010-9,000, 2015-10,000, 2020-11,000, 2025-13,000

TABLE 3-13
CITY OF SAN DIEGO
LONG-TERM RESOURCE MANAGEMENT OPTIONS
STRATEGIC PLAN

PROJECTED CAPACITY
WITH MIRAMAR HEIGHT INCREASE,
SYCAMORE EXPANSION,
GREGORY CANYON AND
IMPACT FROM CITY ORDINANCES

(100% SANDAG)

MSW Declining Capacity Projections by Landfill (2006 Base Volumes)																			
Landfill	Borrego			Otay			Ramona			Sycamore			West Miramar			Gregory Canyon			ENDING CAPACITY
Total Est. Permitted Capacity (cu yds)	706,745			62,377,974			2,200,000			48,124,462			56,466,700			49,500,000			
Remaining Estimated Capacity (cu yds)	459,856			33,070,879			690,000			47,388,428			13,687,454 ***			33,400,000			
Closure Date	12/31/2040			4/30/2027 *Tonnage goes to Sycamore			12/31/2006 *Tonnage goes to Sycamore when capacity			12/31/2031			12/31/2016 *Tonnage goes to Sycamore when			12/31/2041			
Permitted Max Disposal (tons/day)	50			5,830 when capacity reached			295 reached			3,965			8,000 capacity reached			1,000,000			TPY
Capacity after Expansion (cy yds)										80,000,000 assume capacity added in 2010			87,760,000 Assume revised capacity in 2010						
Current Remaining Capacity (tons)*													*** adjusted beginning capacity & expansion tons to achieve 2016 closure before diversion & Gregory Canyon						
	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	
2001	271,315	4,625	266,690	19,511,819	1,252,768	18,259,051	407,100	68,044	339,056	27,959,173	909,710	27,049,463	17,187,685	1,327,634	15,860,051				
2002	266,690	4,495	262,195	18,259,051	1,272,512	16,986,539	339,056	71,973	267,083	27,049,463	878,314	26,171,149	15,860,051	1,353,296	14,506,755				
2003	262,195	4,916	257,279	16,986,539	1,430,591	15,555,948	267,083	79,915	187,168	26,171,149	900,626	25,270,523	14,506,755	1,410,554	13,096,201				
2004	257,279	5,268	252,011	15,555,948	1,430,746	14,125,202	187,168	81,427	105,741	25,270,523	925,483	24,345,040	13,096,201	1,478,863	11,617,338				
2005	252,011	4,906	247,105	14,125,202	1,489,073	12,636,129	105,741	69,297	36,444	24,345,040	889,583	23,455,457	11,617,338	1,572,089	10,045,249				
2006	247,105	8,360	238,745	12,636,129	1,500,160	11,135,969	36,444	36,444	0	23,455,457	909,342	22,546,115	10,045,249	1,379,749	8,665,500				
2007	238,745	8,525	230,220	11,135,969	1,532,697	9,603,272				22,546,115	964,218	21,581,897	8,665,500	1,398,575	7,266,926				
2008	230,220	8,691	221,529	9,603,272	1,565,234	8,038,037				21,581,897	982,649	20,599,247	7,266,926	1,391,400	5,875,525				
2009	221,529	8,856	212,673	8,038,037	1,597,771	6,440,266				20,599,247	1,001,081	19,598,166	5,875,525	1,231,226	4,644,300				
2010	212,673	9,021	203,652	6,440,266	1,630,308	4,809,958				66,798,166	1,019,513	65,778,654	10,753,376	1,072,551	9,680,825				
2011	203,652	9,240	194,412	4,809,958	1,454,574	3,355,384				65,778,654	612,392	65,166,262	9,680,825	686,101	8,994,724	33,400,000	1,000,000	32,400,000	
2012	194,412	9,459	184,953	3,355,384	1,472,968	1,882,416				65,166,262	617,826	64,548,436	8,994,724	710,468	8,284,256	32,400,000	1,000,000	31,400,000	
2013	184,953	9,678	175,276	1,882,416	1,491,362	391,054				64,548,436	623,260	63,925,176	8,284,256	734,834	7,549,421	31,400,000	1,000,000	30,400,000	
2014	175,276	9,896	165,379	391,054	391,054	0				63,925,176	1,747,397	62,177,780	7,549,421	759,201	6,790,221	30,400,000	1,000,000	29,400,000	
2015	165,379	10,115	155,264							62,177,780	2,162,278	60,015,502	6,790,221	783,566	6,006,655	29,400,000	1,000,000	28,400,000	
2016	155,264	10,334	144,930							60,015,502	2,188,359	57,827,143	6,006,655	1,004,036	5,002,618	28,400,000	1,000,000	27,400,000	
2017	144,930	10,553	134,377							57,827,143	2,212,210	55,614,933	5,002,618	1,030,274	3,972,345	27,400,000	1,000,000	26,400,000	
2018	134,377	10,772	123,606							55,614,933	2,236,061	53,378,872	3,972,345	1,056,511	2,915,834	26,400,000	1,000,000	25,400,000	
2019	123,606	10,990	112,615							53,378,872	2,259,912	51,118,960	2,915,834	1,082,748	1,833,085	25,400,000	1,000,000	24,400,000	
2020	112,615	11,209	101,406							51,118,960	2,283,763	48,835,196	1,833,085	1,108,986	724,100	24,400,000	1,000,000	23,400,000	
2021	101,406	11,381	90,024							48,835,196	2,713,597	46,121,600	724,100	724,100	0	23,400,000	1,000,000	22,400,000	
2022	90,024	11,553	78,471							46,121,600	3,482,644	42,638,956				22,400,000	1,000,000	21,400,001	
2023	78,471	11,725	66,746							42,638,956	3,527,591	39,111,365				21,400,001	1,000,000	20,400,001	
2024	66,746	11,897	54,848							39,111,365	3,572,538	35,538,827				20,400,001	1,000,000	19,400,001	
2025	54,848	12,069	42,779							35,538,827	3,617,485	31,921,342				19,400,001	1,000,000	18,400,001	
2026	42,779	12,242	30,537							31,921,342	3,662,424	28,258,918				18,400,001	1,000,000	17,400,001	
2027	30,537	12,414	18,124							28,258,918	3,707,363	24,551,555				17,400,001	1,000,000	16,400,001	
2028	18,124	12,586	5,538							24,551,555	3,752,302	20,799,252				16,400,001	1,000,000	15,400,001	
2029	5,538	5,538	0							20,799,252	3,797,241	17,002,011				15,400,001	1,000,000	14,400,001	
2030										17,002,011	3,842,180	13,159,831				14,400,001	1,000,000	13,400,001	

NOTE: Conversion factor to convert from cubic yards to tons is 1,180. This rate was obtained from the Emcon project.

Sources: § CIWMB, Active Landfills Profile
§ San Diego County, Integrated Waste Management Plan, Countywide Siting Element, 2005
§ CIWMB, Disposal Reporting System, Origin of Waste by Landfill
§ SANDAG Regional Growth Forecast Update, Fall 2006
§ Permitted daily tonnage maximums at Sycamore are:
2008-3,965, 2009-6,800, 2010-9,000, 2015-10,000, 2020-11,000, 2025-13,000

TABLE 3-14
CITY OF SAN DIEGO
LONG-TERM RESOURCE MANAGEMENT OPTIONS
STRATEGIC PLAN

PROJECTED CAPACITY
WITH MIRAMAR HEIGHT INCREASE,
SYCAMORE EXPANSION,
GREGORY CANYON AND
IMPACT FROM CITY ORDINANCES

(50% SANDAG)

MSW Declining Capacity Projections by Landfill (2006 Base Volumes)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Landfill	Borrego			Otay			Ramona			Sycamore			West Miramar			Gregory Canyon			ENDING CAPACITY																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
	Total Est. Permitted Capacity (cu yds)	Remaining Estimated Capacity (cu yds)	Closure Date	Permitted Max Disposal (tons/day)	Capacity after Expansion (cy yds)	Current Remaining Capacity (tons)*	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
	706,745	459,856	12/31/2040	50			62,377,974	33,070,879	4/30/2027	*Tonnage goes to Sycamore when capacity reached	5,830		2,200,000	690,000	12/31/2006	*Tonnage goes to Sycamore when capacity reached	295		48,124,462	47,388,428	12/31/2031	3,965	80,000,000	Assume capacity added in 2010	56,466,700	13,687,454	***	12/31/2016	*Tonnage goes to Sycamore when capacity reached	8,000	87,760,000	Assume revised capacity in 2010	*** adjusted beginning capacity & expansion tons to achieve 2016 closure	49,500,000	33,400,000	12/31/2041	1,000,000	TPY																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									

NOTE: Conversion factor to convert from cubic yards to tons is 1,180.

Sources: § CIWMB, Active Landfills Profile
§ San Diego County, Integrated Waste Management Plan, Countywide Siting Element, 2005
§ CIWMB, Disposal Reporting System, Origin of Waste by Landfill
§ SANDAG Regional Growth Forecast Update, Fall 2006
§ Permitted daily tonnage maximums at Sycamore are:
2008-3,965, 2009-6,800, 2010-9,000, 2015-10,000, 2020-11,000, 2025-13,000

TABLE 3-15

CITY OF SAN DIEGO
LONG-TERM RESOURCE MANAGEMENT OPTIONS
STRATEGIC PLAN

PROJECTED CAPACITY
WITH MIRAMAR HEIGHT INCREASE,
SYCAMORE EXPANSION,
GREGORY CANYON AND
IMPACT FROM CITY ORDINANCES

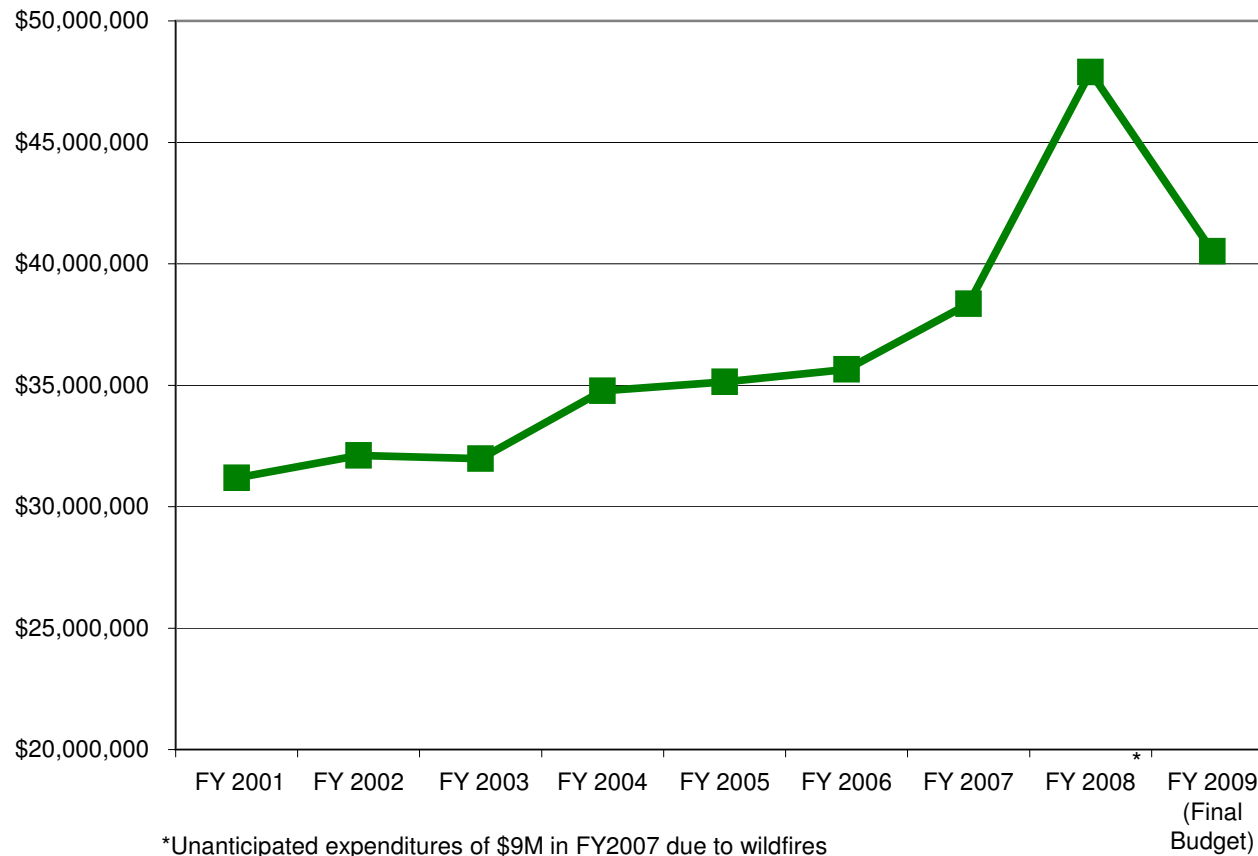
(150% SANDAG)

MSW Declining Capacity Projections by Landfill (2006 Base Volumes)																			
Landfill	Borrego			Otay			Ramona			Sycamore			West Miramar			Gregory Canyon			ENDING CAPACITY
Total Est. Permitted Capacity (cu yds)	706,745			62,377,974			2,200,000			48,124,462			56,466,700			49,500,000			
Remaining Estimated Capacity (cu yds)	459,856			33,070,879			690,000			47,388,428			13,687,454 ***			33,400,000			
Closure Date	12/31/2040			4/30/2027			12/31/2006			12/31/2031			12/31/2016			12/31/2041			
Permitted Max Disposal (tons/day)	50			5,830			295			3,965			8,000			1,000,000			
Capacity after Expansion (cy yds)				*Tonnage goes to Sycamore when capacity reached			*Tonnage goes to Sycamore when capacity reached			Assume capacity added in 2010			*Tonnage goes to Sycamore when capacity reached			TPY			
Current Remaining Capacity (tons)*	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	Beginning Capacity	Annual Disposal Tons	Ending Capacity	TOTALS
2001	271,315	4,625	266,690	19,511,819	1,252,768	18,259,051	407,100	68,044	339,056	27,959,173	909,710	27,049,463	17,187,685	1,327,634	15,860,051				61,774,311
2002	266,690	4,495	262,195	18,259,051	1,272,512	16,986,539	339,056	71,973	267,083	27,049,463	878,314	26,171,149	15,860,051	1,353,296	14,506,755				58,193,721
2003	262,195	4,916	257,279	16,986,539	1,430,591	15,555,948	267,083	79,915	187,168	26,171,149	900,626	25,270,523	14,506,755	1,410,554	13,096,201				54,367,119
2004	257,279	5,268	252,011	15,555,948	1,430,746	14,125,202	187,168	81,427	105,741	25,270,523	925,483	24,345,040	13,096,201	1,478,863	11,617,338				50,445,332
2005	252,011	4,906	247,105	14,125,202	1,489,073	12,636,129	105,741	69,297	36,444	24,345,040	889,583	23,455,457	11,617,338	1,572,089	10,045,249				46,420,384
2006	247,105	8,360	238,745	12,636,129	1,500,160	11,135,969	36,444	36,444	0	23,455,457	909,342	22,546,115	10,045,249	1,379,749	8,665,500				42,586,329
2007	238,745	8,608	230,137	11,135,969	1,545,722	9,590,246				22,546,115	972,565	21,573,549	8,665,500	1,399,293	7,266,207				38,660,140
2008	230,137	8,856	221,281	9,590,246	1,591,284	7,998,962				21,573,549	999,345	20,574,204	7,266,207	1,392,837	5,873,370				34,667,817
2009	221,281	9,104	212,177	7,998,962	1,636,847	6,362,115				20,574,204	1,026,124	19,548,080	5,873,370	1,233,382	4,639,988				30,762,361
2010	212,177	9,352	202,826	6,362,115	1,682,409	4,679,706				66,748,080	1,052,904	65,695,176	10,749,065	1,075,426	9,673,639				80,251,347
2011	202,826	9,692	193,134	4,679,706	1,508,041	3,171,666				65,695,176	634,545	65,060,632	9,673,639	688,461	8,985,178	33,400,000	1,000,000	32,400,000	109,810,609
2012	193,134	10,032	183,101	3,171,666	1,533,874	1,637,791				65,060,632	642,242	64,418,389	8,985,178	713,210	8,271,967	32,400,000	1,000,000	31,400,000	105,911,249
2013	183,101	10,372	172,729	1,637,791	1,559,708	78,083				64,418,389	649,939	63,768,450	8,271,967	737,959	7,534,008	31,400,000	1,000,000	30,400,000	101,953,270
2014	172,729	10,713	162,016	78,083	78,083	0				63,768,450	2,165,094	61,603,356	7,534,008	762,708	6,771,300	30,400,000	1,000,000	29,400,000	97,936,671
2015	162,016	11,053	150,963							61,603,356	2,276,708	59,326,648	6,771,300	787,457	5,983,843	29,400,000	1,000,000	28,400,000	93,861,454
2016	150,963	11,412	139,552							59,326,648	2,313,514	57,013,134	5,983,843	1,008,339	4,975,504	28,400,000	1,000,000	27,400,000	89,528,190
2017	139,552	11,770	127,781							57,013,134	2,348,091	54,665,042	4,975,504	1,034,988	3,940,517	27,400,000	1,000,000	26,400,000	85,133,340
2018	127,781	12,129	115,652							54,665,042	2,382,668	52,282,374	3,940,517	1,061,637	2,878,880	26,400,000	1,000,000	25,400,000	80,676,906
2019	115,652	12,488	103,165							52,282,374	2,417,245	49,865,129	2,878,880	1,088,286	1,790,594	25,400,000	1,000,000	24,400,000	76,158,887
2020	103,165	12,846	90,318							49,865,129	2,451,822	47,413,306	1,790,594	1,114,935	675,659	24,400,000	1,000,000	23,400,000	71,579,284
2021	90,318	13,142	77,177							47,413,306	2,945,812	44,467,494	675,659	675,659	0	23,400,000	1,000,000	22,400,000	66,944,671
2022	77,177	13,438	63,739							44,467,494	3,676,185	40,791,309				22,400,000	1,000,000	21,400,000	62,255,048
2023	63,739	13,733	50,005							40,791,309	3,730,899	37,060,410				21,400,000	1,000,000	20,400,000	57,510,416
2024	50,005	14,029	35,976							37,060,410	3,785,613	33,274,797				20,400,000	1,000,000	19,400,000	52,710,773
2025	35,976	14,325	21,651							33,274,797	3,840,326	29,434,470				19,400,000	1,000,000	18,400,000	47,856,122
2026	21,651	14,631	7,020							29,434,470	3,895,634	25,538,837				18,400,000	1,000,000	17,400,000	42,945,856
2027	7,020	7,020	0							25,538,837	3,958,859	21,579,978				17,400,000	1,000,000	16,400,000	37,979,977
2028										21,579,978	4,021,493	17,558,485				16,400,000	1,000,000	15,400,000	32,958,485
2029										17,558,485	4,077,106	13,481,379				15,400,000	1,000,000	14,400,000	27,881,378
2030										13,481,379	4,132,720	9,348,659				14,400,000	1,000,000	13,400,000	22,748,658

NOTE: Conversion factor to convert from cubic yards to tons is 1,180.

Sources: § CIWMB, Active Landfills Profile
§ San Diego County, Integrated Waste Management Plan, Countywide Siting Element, 2005
§ CIWMB, Disposal Reporting System, Origin of Waste by Landfill
§ SANDAG Regional Growth Forecast Update, Fall 2006
§ Permitted daily tonnage maximums at Sycamore are:
2008-3,965, 2009-6,800, 2010-9,000, 2015-10,000, 2020-11,000, 2025-13,000

**TABLE 4-1
CITY OF SAN DIEGO
LONG-TERM RESOURCE MANAGEMENT OPTION
STRATEGIC PLAN
GENERAL FUND EXPENDITURES TREND**



—■— TOTAL EXPENDITURES

**TABLE 4-2
CITY OF SAN DIEGO
LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN
GENERAL FUND FINANCIAL INDICATORS**

Dimension and Indicator	Definition	Source	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Profitability											
Operating Margin	(Total operating revenue - operating expenses) / Total operating revenue	CAFR Internal Reports	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1
Total Margin	Excess of revenues over expenses / Total revenue	CAFR Internal Reports									
Return on Equity	Excess revenue over expenses / Fund balance(net assets)	CAFR	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1
Return on assets	Net income / Total assets	CAFR									
Liquidity											
Current Ratio	Current assets / Current liabilities	CAFR	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1
Days Cash on Hand	Cash + marketable securities + unretictrcted investments) / [(Total expenses - depreciation)/365]	CAFR	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1
Capital Structure											
Equity Financing	Fund balance / Total assets	CAFR	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1
Debt Service Coverage	(Revenue over expenses + depreciation + interest) / Current portion of long-term debt + interest expense)	CAFR	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1
Cash Flow to Total Debt	(Net Income + depreciation) / Total Liabilities	CAFR	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1
Other											
Total average monthly cost	(Total annual expenses/12)	Internal Reports	\$2,599,033	\$2,675,159	\$2,664,918	\$2,897,787	\$2,928,132	\$2,971,396	\$3,195,632	\$3,991,011	\$3,375,943

Calculation of Average Annual Increase			
	2001-2008		2001-2009
	With Fire	Without Fire	
Increase in expenses	\$1,391,977	\$641,977	\$776,910
Total % Increase	53.6%	25%	25%
Ave Annual % Increase	6.3%	3.2%	3.3%

NOTE 1 A separate balance sheet for the activity within the General Fund is not available.

TABLE 4-3
CITY OF SAN DIEGO
LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN
REFUSE DISPOSAL FUND FINANCIAL INDICATORS

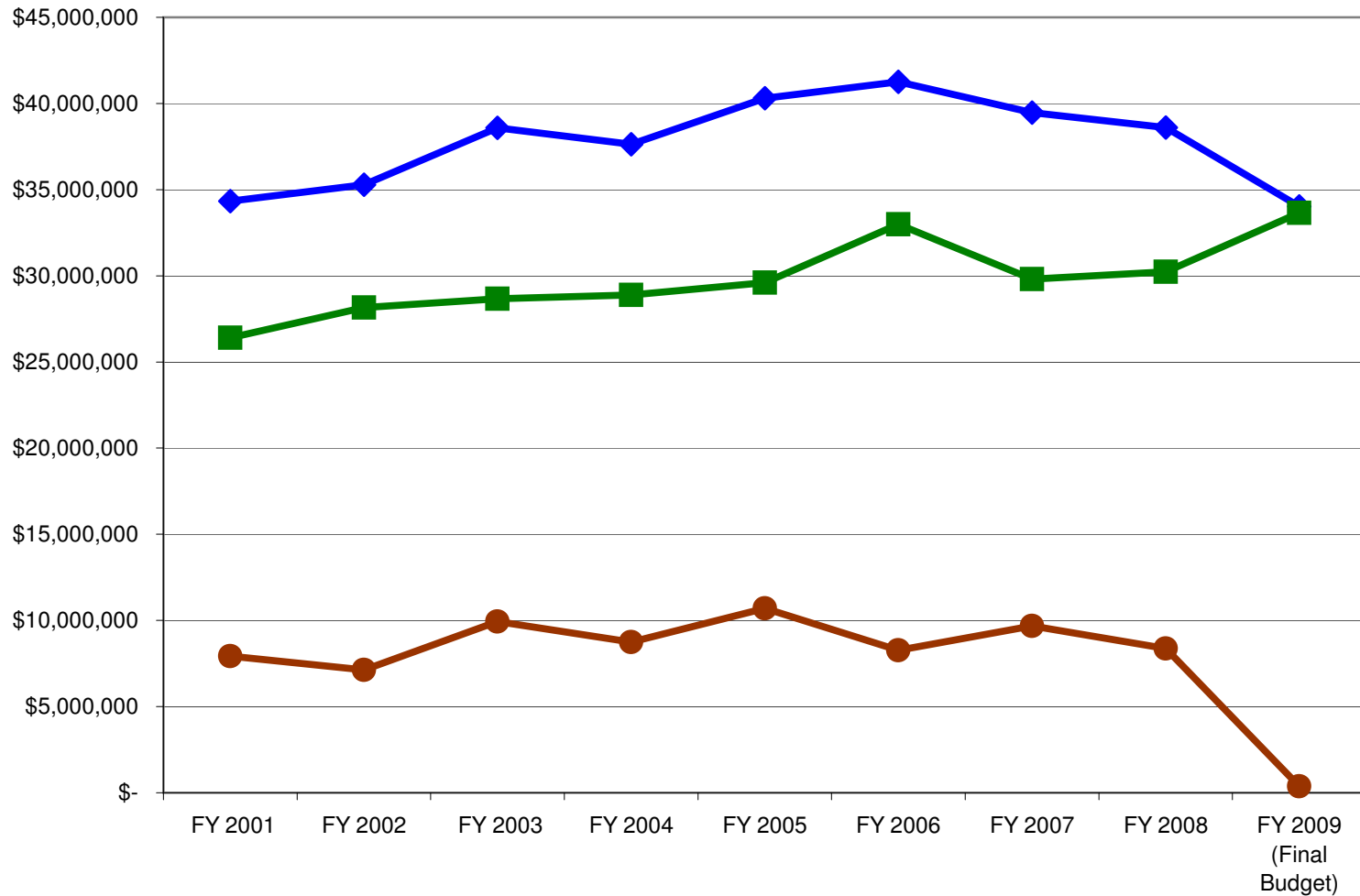
Dimension and Indicator	Definition	Source	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Profitability											
Operating Margin	(Total operating revenue - operating expenses)/ Total operating revenue	CAFR Internal Reports	15%	N/A	-9%	-1%	Note 1 24%	Note 1 17%	N/A 19%	N/A 15%	N/A -2%
Total Margin	Excess of revenues over expenses / Total revenue	CAFR Internal Reports	23%	N/A	1%	2%	Note 1 27%	Note 1 20%	N/A 25%	N/A 22%	N/A 1%
Return on Equity	Excess revenue over expenses / Fund balance(net assets)	CAFR	6.4%	-20.3%	0.4%	0.7%	0.8%	-0.4%	N/A	N/A	N/A
Return on assets	Net income / Total assets	CAFR	25%	N/A	32%	31%	33%	33%	N/A	N/A	N/A
Liquidity											
Current Ratio	Current assets / Current liabilities	CAFR	12.82	N/A	11.10	13.28	13.10	17.54	N/A	N/A	N/A
Days Cash on Hand	Cash + marketable securities + unretreicted investments) / [(Total expenses - depreciation)/365]	CAFR	319.7	N/A	316.9	347.3	368.9	400.4	N/A	N/A	N/A
Capital Structure											
Equity Financing	Fund balance / Total assets	CAFR	91%	N/A	87%	87%	85%	85%	N/A	N/A	N/A
Debt Service Coverage	(Revenue over expenses + depreciation + interest) / (Current portion of long-term debt + interest expense)	CAFR	-	N/A	8.93	10.44	12.64	10.90	N/A	N/A	N/A
Cash Flow to Total Debt	(Net Income + depreciation) / Total Liabilities	CAFR	73%	N/A	36%	39%	38%	30%	N/A	N/A	N/A
Other											
Total average monthly cost	(Total annual expenses/12)	Internal Reports	\$2,200,525	\$2,346,339	\$2,388,741	\$2,407,330	\$2,466,889	\$2,749,257	\$2,483,312	\$2,519,555	\$2,803,850

N/A - Not Available

NOTE 1: Used internal reports for trending purposes.

Calculation of Average Annual Increase		
	2001-2008	2001-2009
Increase in expenses	\$319,030	\$603,326
Total % Increase	14.5%	27%
Ave Annual % Increase	2.0%	3.1%

TABLE 4-4
CITY OF SAN DIEGO
LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN
REFUSE DISPOSAL FUND NET REVENUE



◆ TOTAL REVENUE

■ TOTAL EXPENDITURES

● NET REVENUE OVER EXPENDITURES

TABLE 4-5
CITY OF SAN DIEGO
LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN
RECYCLING FUND FINANCIAL INDICATORS

Dimension and Indicator	Definition	Source	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Profitability											
Operating Margin	(Total operating revenue - operating expenses) / Total operating revenue	CAFR Internal Reports	32%	N/A	-10%	-21%	Note 1 -14%	Note 1 -2%	N/A -8%	N/A 2%	N/A -22%
Total Margin	Excess of revenues over expenses / Total revenue	CAFR Internal Reports	35%	N/A	-16%	-21%	Note 1 -6%	Note 1 4%	N/A 0%	N/A 10%	N/A -14%
Return on Equity	Excess revenue over expenses / Fund balance(net assets)	CAFR	42%	-19%	-26%	-44%	-16%	10%	N/A	N/A	N/A
Return on assets	Net income / Total assets	CAFR	83%	N/A	90%	103%	156%	180%	N/A	N/A	N/A
Liquidity											
Current Ratio	Current assets / Current liabilities	CAFR	16.0	N/A	4.8	2.9	2.8	3.9	N/A	N/A	N/A
Days Cash on Hand	Cash + marketable securities + unretreicted investments) / [(Total expenses - depreciation)/365]	CAFR	316.2	N/A	193.8	178.5	124.6	135.3	N/A	N/A	N/A
Capital Structure											
Equity Financing	Fund balance / Total assets	CAFR	69%	N/A	57%	49%	51%	61%	N/A	N/A	N/A
Debt Service Coverage	(Revenue over expenses + depreciation + interest) / (Current portion of long-term debt + interest expense)	CAFR	-	N/A	(0.82)	(1.16)	0.08	1.34	N/A	N/A	N/A
Cash Flow to Total Debt	(Net Income + depreciation) / Total Liabilities	CAFR	1.04	N/A	(0.21)	(0.29)	(0.00)	0.38	N/A	N/A	N/A
Other											
Total average monthly cost	(Total annual expenses/12)	Internal Reports	\$1,200,784	\$1,546,247	\$1,738,870	\$1,669,180	\$1,795,134	\$1,792,399	\$1,760,066	\$1,843,794	\$1,923,275

N/A - Not Available

NOTE 1: Used internal reports for trending purposes.

Calculation of Average Annual Increase		
	2001-2008	2001-2009
Increase in expenses	\$643,011	\$722,491
Total % Increase	53.5%	60%
Ave Annual % Increase	6.3%	6.1%

**TABLE 4-6
CITY OF SAN DIEGO
LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN**

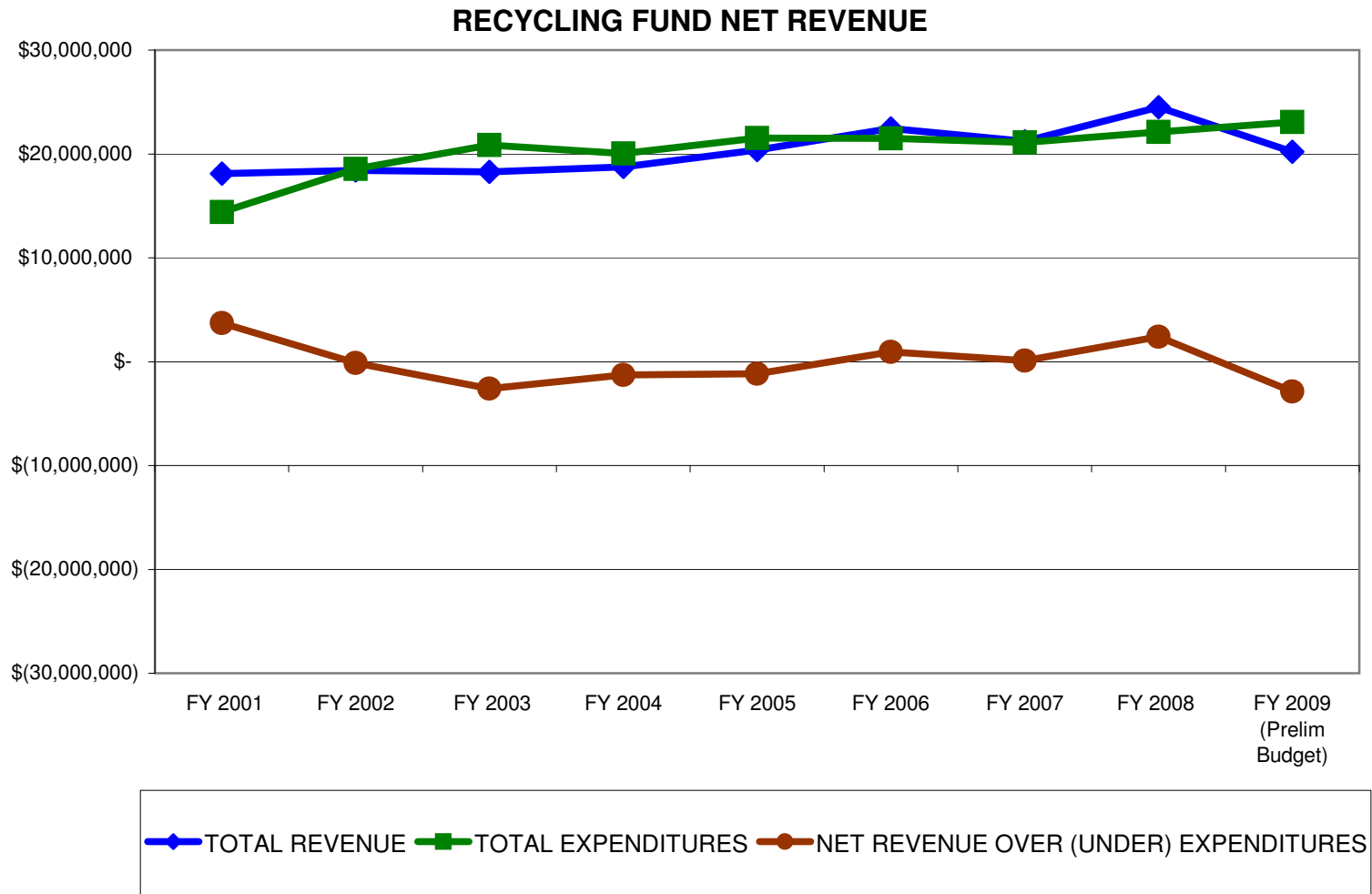


TABLE 7-1
CITY OF SAN DIEGO LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN
CITY OF SANTA MONICA - ZERO WASTE ACTIVITIES

<u>Resource Conservation</u>	<u>Transportation</u>	<u>Waste Reduction and Recycling Activities</u>	<u>Outreach and Education</u>
<ul style="list-style-type: none"> ▪ 100% Renewable Energy for all municipal electricity needs ▪ More than 300kW of solar electric capacity has been installed community-wide ▪ The Community Energy Independence Initiative, will help meet all energy needs with locally produced green power ▪ Most LEED (Leadership in Energy and Environmental Design) certified buildings per capita of any city in the U.S. ▪ Cool Roof technology on municipal buildings ▪ Member of Climate Action Registry to reduce Global Warming 	<ul style="list-style-type: none"> ▪ More than 80% of municipal fleet has transitioned to alternative fuels (natural gas, biodiesel, hydrogen, hybrid and/or electric vehicles) and Big Blue Bus is almost 100% ▪ Bike Valet programs for events around the city ▪ BIKE Santa Monica map released and design of Exposition Bike Way underway 	<ul style="list-style-type: none"> ▪ Santa Monica Urban Runoff and Recycling Facility (SMURRF) ▪ Satellite battery collection sites were launched throughout the community ▪ Curbside recycling <ul style="list-style-type: none"> ○ Single family ○ Multi-family ▪ Commercial source separate cardboard recycling ▪ Restaurant foodwaste recycling ▪ Moving toward MRFing of commercial wastestream with new MRF/transfer proposals 	<ul style="list-style-type: none"> ▪ Free energy efficiency consultations to qualified participants ▪ Community Energy Partnership has given 4th and 7th graders energy efficiency tools to use at home ▪ Zero Waste events (Sunday Main Street farmer's market) ▪ Santa Monica Malibu Unified School District provides local, organic produce to students as part of the organic school salad bar program ▪ Prohibits the use of non-recyclable plastic take-out food service containers

TABLE 7-2
CITY OF SAN DIEGO LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN
CITY OF SANTA CRUZ - ZERO WASTE ACTIVITIES

<u>Resource Conservation and Reuse</u>	<u>Transportation</u>	<u>Waste Reduction and Recycling Activities</u>	<u>Outreach and Education</u>
<ul style="list-style-type: none"> ▪ Buy Efficiency Resolution, passes in 1998, directs staff that all energy consuming equipment be energy efficient ▪ Energy efficient lighting and room occupancy light sensors in city buildings ▪ Sleep mode on computers ▪ LEDs (light-emitting diodes), which use 80-90% less energy and require less maintenance, have been installed on 95% of traffic signals ▪ Photovoltaic cell systems installed on the roof of the City Hall Annex Building, the Corporation Yard building, and the Regional Wastewater Treatment Facility ▪ Promotes the use of water-and energy-efficient toilets, clothes washing machines and other products 	<ul style="list-style-type: none"> ▪ City pays for bus passes for city employees ▪ Bike racks at all local businesses ▪ CHG (Compressed Natural Gas) Van Employee Carpool ▪ City offers a 0% loan for the purchase of a bicycle for city employees ▪ Carpool incentives ▪ Yellow Bike Program ▪ Bike Valet Parking programs ▪ 9/80 work weeks for City Hall employees (voluntary, alternative work week which yields on less trip every two weeks) ▪ CHG Parking Control Scooters 	<ul style="list-style-type: none"> ▪ Zero Waste Task Force ▪ Resource Recovery Facility (RRF)- Operates and maintains the recycling drop-off and processing center at the City landfill. ▪ Variable refuse rate structure (customer rate increases with the volume of refuse collected and recycling is provided for free) ▪ Business recycling services <ul style="list-style-type: none"> ○ Bins for cardboard, office paper, and containers ▪ Curbside recycling <ul style="list-style-type: none"> ○ Single-families receive divided recycling cart for mixed paper and containers ○ Used oil filters and motor oil accepted ▪ Greenwaste recycling ▪ Smart shopping seminars program (promotes source reduction) ▪ Annual Resource Conservation Fair (provides information and free drop-off of reusables, recyclables, and greenwaste) ▪ Free service tags (for extra refuse) and disposal coupons to use at the RRF ▪ Appliance pick-up dates ▪ GreenCycle program ▪ Landfill gas recovery and power generation system 	<ul style="list-style-type: none"> ▪ School Recycling and Waste Reduction Program: <ul style="list-style-type: none"> ○ School recycling ○ Tours of city landfill and RRF ○ Classroom presentations ○ Teacher resource library(paper making kits for loan) ▪ Newsletter-“Trash Talk” dedicated to waste reduction for 3rd, 4th, and 5th graders ▪ Home composting programs

TABLE 7-3
CITY OF SAN DIEGO LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN
CITY OF OAKLAND - ZERO WASTE ACTIVITIES

<u>Resource Conservation and Reuse</u>	<u>Transportation</u>	<u>Waste Reduction and Recycling Activities</u>	<u>Outreach and Education</u>
<ul style="list-style-type: none"> ▪ Green Building Initiative ▪ Oakland has more than eighty businesses certified by the Bay Area Green Business Program ▪ Alternate Fuel Vehicle Program <ul style="list-style-type: none"> ○ Two city vehicle run on electricity ▪ Oakland International Airport has a 700 kW solar system ▪ Funded for solar power systems atop City facilities 	<ul style="list-style-type: none"> ▪ CNG Public Access Fueling Station ▪ Installed 87 miles of bike lanes and routes ▪ Market Street Bikeway ▪ Purchased and installed over 900 bike parking racks accommodating more than 2,060 bicycles ▪ Coordinated Oakland's annual "Bike to Work Day" event since 1993 ▪ Secured funding for and oversaw construction of Oakland's first Bike Station at the Fruitvale BART ▪ Secured millions of dollars of grant revenue for bicycle and pedestrian safety and capital projects in all districts from local, state and federal sources ▪ Hosted Oakland's first Car-Free Day in California in 2004 ▪ Initiated and hosted WalkBike California 2003, California's first conference devoted to walking and bicycling, in partnership with the California Bicycle Coalition ▪ Planned, funded and implemented significant segments of the Oakland Bay Trail, with bicycle and pedestrian facilities, SF Bay Trail signage, trees, and historic markers ▪ Installed bicycle parking at garages downtown and at major City facilities, including a card-access bicycle cage for City employees that is a model for new construction ▪ City CarShare is a Bay Area nonprofit providing convenient, affordable access to cars to reduce individual car ownership 	<ul style="list-style-type: none"> ▪ Curbside pickup; garbage, recyclables, and greenwaste ▪ Residents may now schedule bulky pick up any time from February through December ▪ Eligible residents may set out more properly prepared, designated household recyclable items, reserving their 3-cubic-yard limit for non-recyclables waste items ▪ Food vendors may not use polystyrene foam disposable food service ware, must use biodegradable and/or compostable ▪ City of Oakland Litter Enforcement Officer ("LEO") program is to provide a fast, effective, and professional response to illegal dumping 	<ul style="list-style-type: none"> ▪ StopWaste.org: <ul style="list-style-type: none"> ○ Recycling guide ○ Recycling hotline ○ Bay Friendly Gardening and home composting program ○ School recycling projects ○ Grant and recycling market development projects ▪ Re-Create Art Contest and Exhibition for youth ▪ Celebrates American Recycled Day (ARD) every year to educate community ▪ Oakland's TV station completed a ten part Sustainable TV series in 2005 ▪ ZeroWaste Oakland Yahoo! group: http://groups.yahoo.com/group/ZeroWasteOakland ▪ The Oakland Sustainable Design Guide is a design tool that can be used to overlay environmental issues on the design, construction, and operation of both new and renovated facilities

TABLE 7-4
CITY OF SAN DIEGO LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN
CITY OF BERKELEY - ZERO WASTE ACTIVITIES

<u>Resource Conservation and Reuse</u>	<u>Transportation</u>	<u>Waste Reduction and Recycling Activities</u>	<u>Outreach and Education</u>
<ul style="list-style-type: none"> ▪ City will finance the cost of solar panels for property owners who agree to pay it back with a 20-year assessment on their property (<i>Officials in San Francisco, Santa Cruz, Santa Monica and several state agencies have contacted Berkeley about the details of the plan</i>) ▪ Dozens of companies have joined Climate Wise, a national program designed to reduce greenhouse gases through resource conservation and efficiency ▪ Berkeley's CECO and RECO require specific energy and water conservation measure beyond Title 24 minimums in all commercial or residential buildings sold or transferred 	<ul style="list-style-type: none"> ▪ "Everyone Walk" Program ▪ Solid Waste Division is using the international Environmental Management System ISO 14001 ▪ City developed a CNG fueling station ▪ Converted its diesel fleet to biodiesel ▪ City fleet also includes electric vehicles ▪ Berkeley Bicycle Plan ▪ Network of seven bike boulevards which are bicycle-oriented streets ▪ Eco-Pass Program for city employees, free unlimited rides on AC transit ▪ Three different Car Sharing programs (City CarShare, Zipcar and Flexcar) 	<ul style="list-style-type: none"> ▪ Finances their hazardous waste prevention and management services from the Chemical Storage Fee they charge facilities ▪ Organics collection program for selected businesses and a curbside green waste collection program for residence ▪ Urban Ore Eco Park: <ul style="list-style-type: none"> ○ Reuse businesses ○ Salvage and recycling departments ○ General store 	<ul style="list-style-type: none"> ▪ Shorebird Nature Center <ul style="list-style-type: none"> ○ wind powered ○ straw bale structure model for green design principles. ▪ Green Resource Center, provides information on green building ▪ Energy Office conducts energy audits for residents, industries and businesses and hosts energy efficiency and reduction programs ▪ Residential Energy Conservation Ordinance (RECO)

TABLE 7-5
CITY OF SAN DIEGO LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN
CITY OF LOS ANGELES - ZERO WASTE ACTIVITIES

Page 1 of 2

<u>Resource Conservation and Reuse</u>	<u>Transportation</u>	<u>Waste Reduction and Recycling Activities</u>	<u>Outreach and Education</u>
<ul style="list-style-type: none"> ▪ (LADWP) Solar <i>Photovoltaic (PV)</i> Incentive Program ▪ LA Shares <ul style="list-style-type: none"> ○ Non-profit materials reuse program ○ Takes donations of reusable materials from local businesses and redistributes them free-of-charge to non-profits and schools throughout LA County ▪ Market urban organics to farmers to restore the health of soils and reduce use of fertilizers, pesticides and irrigation water ▪ Provide funding and permitting for certified Green Businesses ▪ Expand City's use of Green Buildings ▪ Restore functional buildings, rather than demolish ▪ Purchase Zero Waste products and services; return to vendor any wasteful packaging; reduce packaging and buy in larger units; use reusable shipping containers 	<ul style="list-style-type: none"> ▪ Require Caltrans to use mulch and compost made from urban organics to landscape freeways, and to use recycled materials in sub-base and road mixes ▪ "Electric vehicle ready" through the development and support of an advanced electric transportation industry ▪ The DWP currently utilizes more than 300 electric vehicles for carpools, meter reading and other field applications ▪ LADWP offers a special discounted electric rate for EV charging 	<ul style="list-style-type: none"> ▪ Place blue bins wherever there are black bins in all public locations ▪ Ban products from being sold or require businesses to take back packaging that are not currently recyclable in the area ▪ Require all multi-family dwelling owners to provide recycling services ▪ Require all residents and businesses to source separate designated reusables, recyclables and compostables ▪ Increase use of rebates to provide incentives for marginally economic materials to be reused, recycled or composted. ▪ Support local, regional and state landfill surcharges, and bond issues to fund low-interest loans and/or grants to develop needed infrastructure ▪ Support elimination of state "credit" to count alternative daily cover (ADC) as diversion immediately to help stimulate the development of new composting facilities, particularly ones that 	<ul style="list-style-type: none"> ▪ Make industries aware of materials and products that are problems for the City's zero waste goals ▪ Adopt Pay As You Throw rebates, a Recycling Lottery and/or Recycle Bank system to provide incentives for residents ▪ Work with LA Unified School District to integrate Zero Waste into curriculum ▪ Train managers of buildings and facilities about Zero Waste systems and resources ▪ CAMPostables, an environmentally sustainable camping program, using biodegradable and compostable plates and utensils. (The 3 C's: Corn, Cups, and Composting). ▪ LADWP Education Partnership Programs: <ul style="list-style-type: none"> ○ Cool Schools Tree Planting and Education Program ○ Adopt-A-School ○ Teacher Training and Lesson

TABLE 7-5
CITY OF SAN DIEGO LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN
CITY OF LOS ANGELES - ZERO WASTE ACTIVITIES

Page 2 of 2

<u>Resource Conservation and Reuse</u>	<u>Transportation</u>	<u>Waste Reduction and Recycling Activities</u>	<u>Outreach and Education</u>
<ul style="list-style-type: none"> ▪ Issued RFP for 1st Alternative Technology facility in the U.S ▪ The City recovers biosolids from its wastewater treatment plants <ul style="list-style-type: none"> ○ Farmers use some of the biosolids as a soil amendment and fertilizing material and some are mixed with green materials to produce compost ▪ Encourage deconstruction, salvage, and reuse of materials from C&D projects 		<p>can process food scraps</p> <ul style="list-style-type: none"> ▪ Increase fees on waste hauling services to provide more economic incentives for recycling, and to generate funds for new recycling programs ▪ Develop Resource Recovery Parks in each wasteshed ▪ Eliminate use of urban landfills for all City-collected waste ▪ Initiated Pilot Restaurant Foodwaste composting project ▪ Supermarket producer composting project ▪ 28 Jiffy lube stores collect and recycle household batteries ▪ “On-call” bulky item pick-up for single-family and multi-family ▪ Refrigerator Turn-In and Recycle program (RETIRE). Turn in your old refrigerator or freezer and receive \$35 and compact fluorescent bulbs. 	<p>Distribution</p> <ul style="list-style-type: none"> ○ Power Plant I Field Trips ▪ Trees for a Green LA. ▪ Form partnerships with the private sector for Zero Waste infrastructure development for the multi-family and commercial wastestreams ▪ “Closing the Loop” (commitment to the Buy Recycled Program) ▪ Fund programs on on-going basis to educate residents, businesses and visitors about new rules and changes overtime ▪ Encourage residents and businesses to use more Green Buildings ▪ Free composting workshops and sales on bins every month ▪ SWIRP Zero Waste Workshops ▪ Consumer Rebate Program (CRP) to promote energy-efficient products

TABLE 7-6
CITY OF SAN DIEGO LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN
CITY OF SAN FRANCISCO - ZERO WASTE ACTIVITIES

<u>Resource Conservation and Reuse</u>	<u>Transportation</u>	<u>Waste Reduction and Recycling Activities</u>	<u>Outreach and Education</u>
<ul style="list-style-type: none"> ▪ Resource Conservation Ordinance (City departments directed to maximize waste reduction and purchase recycled products) ▪ Green Building Ordinance ▪ Power Savers and Peak Energy Programs (retrofitting lighting systems in business, commercial, and residential buildings) ▪ Business Council on Climate Change (BC3) ▪ LED(Light Emitting Diodes) traffic signals 	<ul style="list-style-type: none"> ▪ 1,500 City fleet vehicles, from ambulances to street sweepers, run on biodiesel (Fuel B20, a mix of 20% soy-based biofuel and 80% petroleum diesel fuel) ▪ Mass transit fleet with 57% zero-emission vehicles ▪ Trip reduction programs: <ul style="list-style-type: none"> ○ Pre-tax Commuter Benefits Program ○ Emergency Ride Home ○ Bicycle Promotion ○ Ride-share Programs ○ City Bicycle Fleet Program ▪ Bike lanes added to major thoroughfares ▪ More than 100 compressed natural gas (CNG) taxis ▪ San Francisco International Airport received a grant to acquire 14 parking lot, hotel, and airline crew shuttles to run on Hythane® fuel (20%hydrogen and 80% natural gas) 	<ul style="list-style-type: none"> ▪ Food Service Ware Ordinance banning non-recyclable and non-compostable “to-go” containers. ▪ Plastic Bag Ban in stores generating over \$1 million in revenue per year. ▪ C&D Ordinance ▪ Zero Waste Resolution ▪ SFGreasecycle: <ul style="list-style-type: none"> ○ City picks up used cooking oil and grease from restaurants, hotels, and schools to be turned into biodiesel. ▪ Residential curbside recycling <ul style="list-style-type: none"> ○ Compost collection ○ Bulky item pick-up twice a year ▪ Business recycling <ul style="list-style-type: none"> ○ Mixed paper, cardboard, mixed containers, compost collection ▪ Large Venue and Large Event Recycling Programs 	<ul style="list-style-type: none"> ▪ Spare the Air Program ▪ Bay Area Junk Mail Reduction Campaign ▪ Plastic water bottle pledge on city website ▪ Created a cost incentive for businesses to participate in the Food Scraps program, over 2000 businesses have joined.

TABLE 7-7
CITY OF SAN DIEGO LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN
RESOURCE RECOVERY PARKS IN CALIFORNIA

Page 1 of 6

MONTEREY RR PARK, MARINA, CA

Operated by Monterey Regional Waste Management District (MRWMD)

The RR park includes:

- a 315-acre permitted sanitary landfill site;
 - a 126-acre buffer area (mostly Salinas River floodplain);
 - 20 acres for the administration building, scale house, and public drop-off recycling station;
 - a resale facility (Last Chance Mercantile);
 - maintenance buildings;
 - landfill gas-to-electrical energy system (generates 2,800 kilowatts of continuous power);
 - a 95,000-square foot materials recovery facility (MRF);
 - a permanent household hazardous waste collection facility;
 - construction and demolition (C&D) recycling operations;
 - composting facilities; and
 - a soils blending facility.
-
- MRWMD limits land uses at the site to compatible uses and facilities that use recycled materials as feedstock.
 - Sells low-cost landscaping supplies made from recycled wood and yard waste, available by the ton at the MRF and in bags at the Last Chance Mercantile.
 - Does not include processing of residential curbside materials as part of their MRF, instead targets self-haul loads and commercial waste, C&D debris, wood waste, and yard waste.
 - MRF building was built featuring recycled construction materials, from its base rock and wall paneling, to its bathroom tiles and floor covering (employees meeting area floor coverings are made from recycled tires).

TABLE 7-7
CITY OF SAN DIEGO LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN
RESOURCE RECOVERY PARKS IN CALIFORNIA

Page 2 of 6

URBAN ORE RR PARK, BERKELEY, CA

Owned and operated by Urban Ore, with support from the City, the Alameda County Recycling Board and California Integrated Waste Management Board (CIWMB)

- Located on 7th Street, half a block south of Ashby, right off Interstate 80.
- 2.2-acre RR park in a former steel pipe manufacturing facility.
- Demonstration project, houses a synergistic collection of reuse businesses and small manufacturers.
- Has good public visibility and located near two major lumberyards, a hardware store, and two other reuse facilities.

Departments:

- Building materials exchange
- Hardware exchange
- Arts and media exchange
- General store
- Salvage and recycling

- Subtenant businesses who focus on reuse or manufacturing from recycled feedstocks. Subtenants include:
 - Nonprofit organizations that rebuild and upgrade computers and sell at low cost to low-income people.
 - Companies that make high-quality countertops out of recycled glass embedded in cement
 - A blacksmith who makes products from scrap steel.
 - Overflow warehousing for another reuse company.
- No composting business because the site is too small and located in a densely populated neighborhood.
- Discussing a product sales exchange.
- Plans also include a large meeting room to host community and recycling groups, classes on how to use recycled materials, and training for employees on site.

TABLE 7-7
CITY OF SAN DIEGO LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN
RESOURCE RECOVERY PARKS IN CALIFORNIA

Page 3 of 6

SAN LEANDRO RR PARK, SAN LEANDRO, CA
<p>Owned and operated by Waste Management (WM)</p> <ul style="list-style-type: none">▪ 53-acre Davis Street Transfer Station.▪ 4.5-acre integrated yard and wood waste processing system on site, running 40 to 70 tons per hour.<ul style="list-style-type: none">▪ Three-quarters of materials processed are from curbside collection programs.▪ The rest of the material is received by public drop-off, brought in by roll-offs, or salvaged from the wood in the Davis Street Transfer Station's public disposal area.▪ Materials are pre-screened, hand-sorted, and then ground in a 500 hp electric stationary horizontal hammer mill with a spiked roll drum.▪ Building Materials Exchange Facility, operated by The Reuse People of Alameda County, that accepts used items for reuse and sale at reduced prices.<ul style="list-style-type: none">▪ The Reuse People also provide a collection service, materials include: bathtubs, bicycles, bricks, building material, doors, garden tools, kitchen fixtures, etc.▪ Tire recycling and crumb rubber facility▪ Davis Street Education Center, where students learn about garbage and landfill history and recycling practices, is a 1,500-square foot center with seven interactive exhibits and provides tours of the facilities.▪ Two demonstration gardens that use mulch and compost products.

TABLE 7-7
CITY OF SAN DIEGO LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN
RESOURCE RECOVERY PARKS IN CALIFORNIA

Page 4 of 6

CABAZON RR PARK, MECCA, CA

Owned by the Cabazon Band of Mission Indians who set aside a 590-acre portion of their reservation for a RR park.

- Located off Interstate 10 via State Highway 111.

Enterprises currently operating:

- Colmac Energy, Inc. (a biomass-fueled power generation plant).
- First Nation Recovery Inc. (a crumb rubber manufacturer from old tires).

Proposed projects:

- Metals reclamation.
- Biomass gasification (tires, organics, plastics)
- Used oil refinery
- Ethanol or methanol facility
- Food and green waste composting.
- Metals recycling
- C&D recycling
- Reclaimed glass.
- Plastics and rubber molding.
- Organic prawn farm.
- Soil blending and bagging.
- Paper de-inking.
- Steel production.
- Regional materials recovery facility.

Other industries that reuse, recycle, or transform waste into useful commodities.

TABLE 7-7
CITY OF SAN DIEGO LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN
RESOURCE RECOVERY PARKS IN CALIFORNIA

Page 5 of 6

SAN LUIS OBISPO RR PARK, SAN LUIS OBISPO, CA

Owned and operated by the San Luis Obispo County Integrated Waste Management Authority (IWMA)

- | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none">▪ Quick startup, low cost▪ \$20 facility utilization fee for garbage▪ Materials received: 32% C&D, 31% Wood, 23% Greenwaste, 11% Metals, 2% Cardboard, 1% Recyclables |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

TABLE 7-7
CITY OF SAN DIEGO LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN
RESOURCE RECOVERY PARKS IN CALIFORNIA

Page 6 of 6

CATALINA SUSTAINABLE POWER PARK MODEL, CATALINA ISLAND, CA

- EcoSoul's Conceptual Model
- The Sustainable Power Park will become a "free standing island of renewable energy education and technology".
- Can be used as a teaching and learning center for both local citizens and visitors to the Island.
- The possible energy sources and conversion methods that will be considered at varied levels are:

SOURCE:	CONVERSION METHOD:	PRODUCT:
Biomass	Pyrolysis, digestion	Electricity, fuel, peat
Municipal Solid Waste	Pyrolysis, digestion	Electricity, fuel
Solar	Photovoltaic, thermal	Electricity, heat
Wind Pumping	Turbine	Electricity, water
Tidal Current Flow	Subsurface turbine	Electricity
Wave Power	Wave system	Electricity
Hydroelectric	Micro-hydro	Electricity, storage

TABLE 7-8
CITY OF SAN DIEGO LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN
RESOURCE RECOVERY PARKS
OUTSIDE CALIFORNIA AND THE UNITED STATES
Page 1 of 3

BINN FARM RR PARK, TAYSIDE AREA, SCOTLAND

SITA UK, one of UK's largest waste management company is the owner and operator.

- Present waste recovery and management uses:
 - a non-hazardous landfill generating electricity from landfill gas;
 - a MFR for processing industrial and commercial waste;
 - an in-vessel composting (IVC) facility, processing kitchen-waste, animal by-products, and green waste.
- Planning approval for:
 - a thermal treatment/Energy from Waste (EfW) facility, and
 - a MRF for the separation and packaging of curbside collected, dry recyclables.
 - The EfW facility will generate electricity through thermal treatment of 60,000 tons/yr of residual municipal waste that cannot be recycled or composted.
 - Facility will use modern moving grate technology.

TABLE 7-8
CITY OF SAN DIEGO LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN
RESOURCE RECOVERY PARKS
OUTSIDE CALIFORNIA AND THE UNITED STATES
Page 2 of 3

MACARTHUR RESOURCE RECOVERY PARK, SYDNEY, AUSTRALIA

- Built and operated by WSN Environmental Solutions on their existing Jacks Gully (Narellan) landfill site.
- First large scale fully integrated municipal waste management site in Australia.
- Will process recyclables, organics and mixed solid waste from four different council areas (these four councils will be the foundation partners in the park).
- All waste brought to the Park is treated on-site, only recovered products such as recyclables and compost leave the site.
- The site includes a number of facilities which include:
 - The Ecolibrium Mixed Waste Facility designed to process household waste, using ArrowBio technology from the Arrow Ecology Group in Israel;
 - The Ecolibrium Organics Facility, a fully enclosed tunnel composting system. Mulch and compost produced in sold through WSN's "Garden to Garden" brand;
 - A materials Recycling Facility (MRF) for sorting recyclables;
 - A Resident "Drop-off Center" for community members to dispose of small quantities of greenwaste, recyclables and domestic hazardous materials;
 - A Community Visitor and Education Center;
 - A "Revolve Center" for the sale of recovered items;
 - A "Clean Up Waste" recovery facility of sorting items collected from council's curbside clean up service; and
 - A landfill for non-putrescible waste.
- The ArrowBio process at the Mixed Waste Facility is designed to capture up to 100% of the biogas that is produced as waste breaks down.
- Facility will prevent 23,000 tons of greenhouse gas emissions per year and will produce more water than it uses.

TABLE 7-8
CITY OF SAN DIEGO LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN
RESOURCE RECOVERY PARKS
OUTSIDE CALIFORNIA AND THE UNITED STATES
Page 3 of 3

SENECA MEADOWS RENEWABLE RESOURCE PARK, WATERLOO, NY

- Owned and operated by IESI-Seneca Meadows.
- Located next to the Seneca Meadows Landfill.
- Plans to create:
 - a wetlands educational and recreation complex,
 - a business developments park fueled by landfill gas, and
 - a community education center, that will include a science laboratory and exhibit room.
- First tenant, H2Gro, a hydroponics tomato greenhouse company, will operate up to 20 acres of greenhouses.
- Tire recycling and shredding facility (shredded tires are used at landfill as replacement for stone).

TABLE 7-9
CITY OF SAN DIEGO LONG-TERM RESOURCE MANAGEMENT OPTIONS STRATEGIC PLAN
SCREENING CRITERIA FOR CONVERSION TECHNOLOGIES

Conversion Technology	Financial Viability	Technical Viability	Regional Viability	Environmental Viability	Capacity Optimization	Sustainability
Gasification & Pyrolysis	Tipping fee ranging from \$60-\$100/ton	Commercial overseas for MSW in >20 applications; capacities up to 600 tpd	Viable option but public acceptability subject to site-specific determination	Generates electricity and/or fuels; reduces greenhouse gas emissions; low air emissions profile associated with combustion of pre-cleaned synthesis gas	Potential for high diversion from landfill disposal (85% to 100% diversion by weight))	Converts post-recycled MSW and MRF residuals that would otherwise be landfilled into electricity and/or fuels, aggregate, and other products; moderate to high certainty of marketing non-energy products
Anaerobic Digestion	Tipping fee ranging from \$40-\$60/ton	Commercial overseas for MSW in >10 applications; capacities up to 900 tpd	Viable option but public acceptability subject to site-specific determination	Generates electricity and/or fuels; reduces greenhouse gas emissions; low air emissions profile associated with combusting methane-based biogas	Potential for moderate to high diversion from landfill disposal (65% to 85% diversion by weight)	Recovers recyclables and converts post-recycled MSW and MRF residuals that would otherwise be landfilled into electricity and/or fuels and compost; low to moderate certainty of marketing compost for higher uses than alternative daily landfill cover
MSW Composting	Tipping fee ranging from \$35-\$90/ton	13 plants operating in U.S., mostly in small communities	Issues with marketability of final product, and acceptability related to potential odor	Odor an issue at some facilities. Final product quality and marketability also an issue.	Facility range: 50-250 tpd; high diversion as long as final product can be sold.	Recovers and converts organics for soil amendment. Product marketability and value are key issues.
Mechanical Processing (Autoclave)	Commercial tipping fee not yet established	No commercial plants in operation in U.S.	Shift in focus from pulp recovery to energy generation would be good regional fit.	Minimal impacts in exchange for good pre-processing capability for follow on conversion technologies	WWI plant in Anaheim, CA operated at 500 tpd with 2 autoclaves.	Can process mixed MSW into feedstock for follow-on conversion. Waste heat from a following thermal process can pre-heat autoclaves.
Hydrolysis	Tipping fee ranging from \$65-\$75/ton	Not yet commercially demonstrated for processing MSW	Viable option but public acceptability subject to site-specific determination	Generates fuel-grade ethanol (a vehicle fuel) and electricity; reduces greenhouse gas emissions; low emissions profile expected from gasification of lignin (a side process)	Potential for high diversion from landfill disposal (90% diversion by weight)	Recovers recyclables and converts post-recycled MSW and MRF residuals that would otherwise be landfilled into fuels and gypsum; moderate to high certainty of marketing non-energy products (gypsum)
Chemical Processing (Depolymerization)	Tipping fee ranging from \$50-\$90/ton	Not yet commercially demonstrated for processing MSW	Viable option but public acceptability subject to site-specific determination	Generates a synthetic diesel fuel and a byproduct carbon fuel; reduces greenhouse gas emissions; low emissions profile expected for auxiliary boiler used to generate process heat	Potential for high diversion from landfill disposal (90% diversion by weight)	Recovers recyclables and converts post-recycled MSW and MRF residuals that would otherwise be landfilled into fuels; moderate to high certainty of marketing fuels